REVIEWS SIMCITY FOR WINDOWS • MAGIC CANDLE II • HARDBALL III • NFL • PLUS 15 MORE

EDITORS' CHOICE
HEAVEN & EARTH

p. 88

PC GAMES

August/September 1992

TEE OFF

Computer Golf's Hottest Foursome

- Jack Nicklaus Signature Edition
- Microsoft Golf
- PGA Tour for Windows
- LINKS 386 Pro

✓ **COOL GAMES FOR HOT DAYS**

✓ **BRUSHES & BACH**
The Creative Side of Fun

✓ **NIGHTMARE ON SEQUEL STREET**

USA $3.95 Canada $4.95
An IDG Communications Publication

FABLES & FIENDS™

THE LEGEND OF Kyrandia™

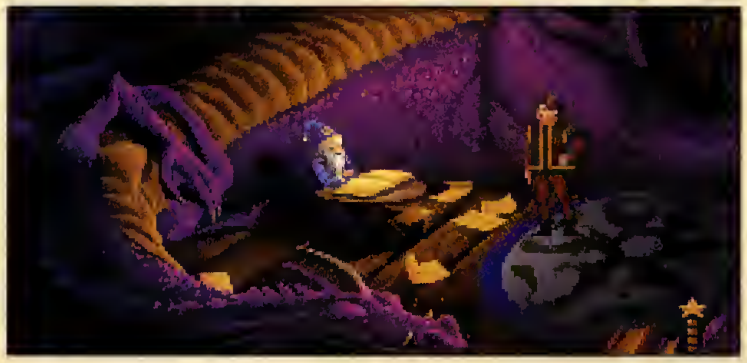
BOOK ONE

Immerse yourself in THE LEGEND OF KYRANDIA™, the first fantasy adventure in the FABLES & FIENDS™ series.

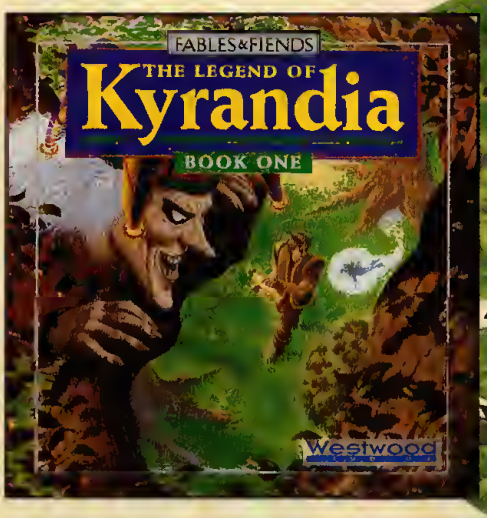
ENTER A LAND WHERE MAGIC IS REAL.

A land of dark mysterious forests and sleeping dragons. A land of glittering rubies and emeralds. A land of breath-taking beauty and secrets to unravel. The land of Kyrandia.

Gorgeous scenes and realistic animation draw you into this fantasy adventure. Elegant point-and-click control makes it easy to play. The fully orchestrated soundtrack will captivate you.



Westwood™ STUDIOS



Distributed exclusively by Virgin GAMES Irvine, CA

For pricing and orders, please call 8ØØ-VRG-INØ7. Visa, Mastercard, American Express and checks accepted. Get help with our hintline! Call 1-900-288-4744. (Calls are charged at 75 cents per minute. You must be 18.)

THE LEGEND OF KYRANDIA AWAITS YOU!

Eye of The Beholder I and II, Advanced Dungeons and Dragons are trademarks of TSR, Inc. King's Quest® is a registered trademark of Sierra On-Line, Inc.
FABLES AND FIENDS and THE LEGEND OF KYRANDIA are trademarks of Westwood Studios, Inc. ©1992 Westwood Studios, Inc. All rights reserved.

Circle 21 on Reader Service Card.

CONTENTS

p. 38

38 **TEE TIME**

by Peter Scisco

What's new on the computer-golf scene? Recent releases and updated titles offer state-of-the-art graphics, tighter-than-ever control, sophisticated strategy, and that irresistible arcade challenge. PCGames profiles the hottest new foursome: Jack Nicklaus Golf & Course Design: Signature Edition, LINKS 386 Pro, Microsoft Golf, and PGA Tour for Windows.

44 **COOL GAMES FOR THE DOG DAYS**

by Ed Ferrell

They say there ain't no cure for the summertime blues, but they're wrong — just flip the switch and turn on your trusty PC. Quick to learn and quick to finish, Paperboy II, Pinball, Rampart, and Super Tetris for Windows play fast and furious and get you back outside before you can even say "sunblock."

50 **TAKE 2: PLAY IT AGAIN . . .**

by Gregg Keizer

We're swimming in series and sequels — but when game players latch onto something, game publishers are loath to let go. Sales figures talk, and developers listen.

56 **THE ART OF FUN**

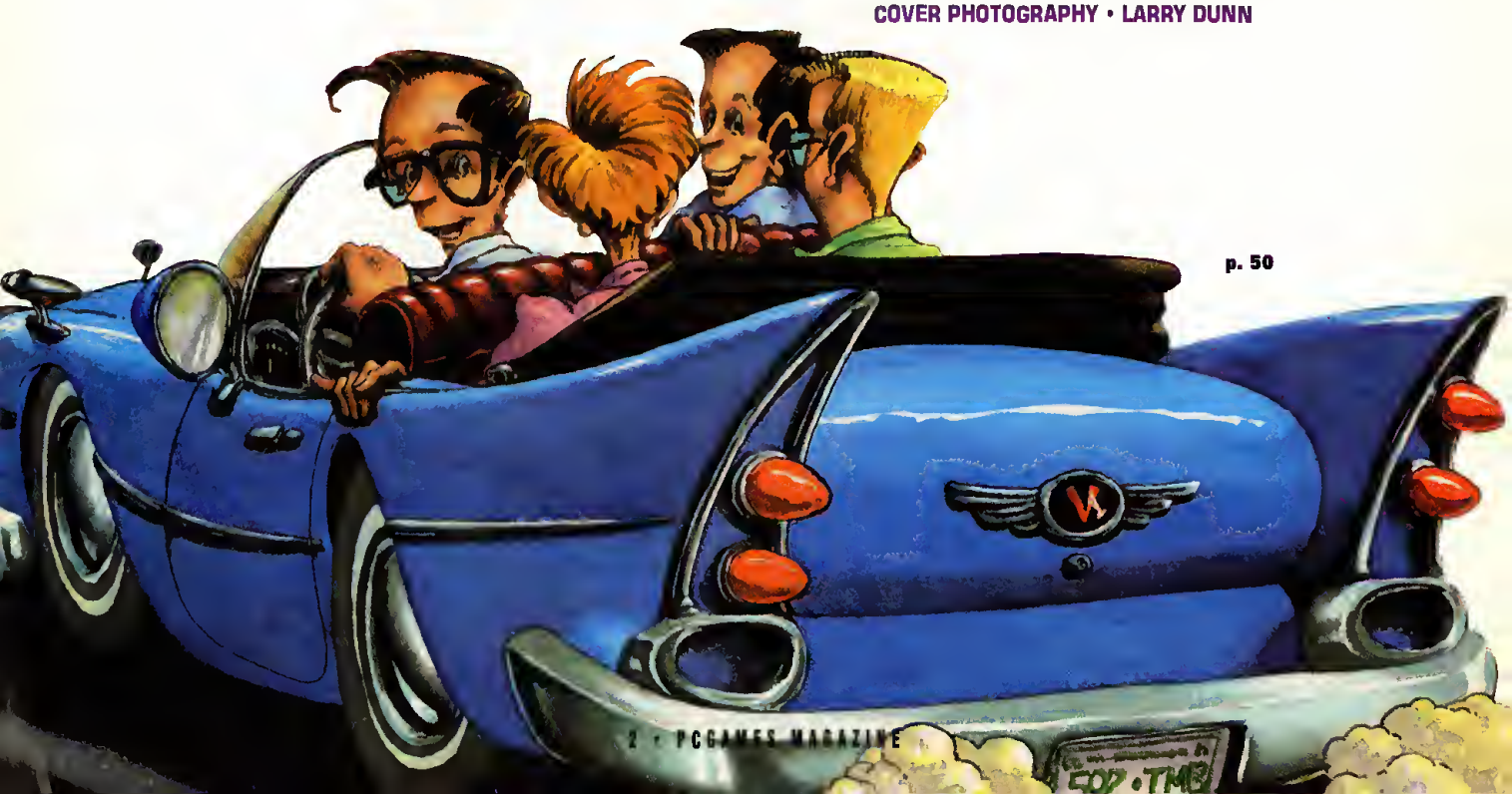
by Heidi E.H. Aycock

Remember how it felt to draw the ideal race car or beat out your first real drum roll? Recapture that experience today — right on your home computer. PCGames takes a look at the latest in creativity programs for kids (and the young at heart): KidPix, Windows Draw, Computer Quest, and NotePlay.

(Continued on page 4)

p. 44

COVER PHOTOGRAPHY • LARRY DUNN



p. 50

Might and Magic®

ENTER THE CLOUDS OF XEEN

A 3-D world beseiged with mystics and monsters, sages and sorcerers, diabolical plots and sinister schemes!

No set course of play or predetermined path of events — either you perish or prosper.
The terrain of Xeen comes alive with state of the art illustrations and animated graphics.
256 VGA color, musical scores, sound effects and digitized speech to move your soul.
New updated automatic message keeping enables you to keep your eyes on the action.

ENOUGH TALK—LET'S PLAY—THE CLOUDS OF XEEN AWAIT YOU.

AVAILABLE AT YOUR LOCAL SOFTWARE RETAILER OR DIRECT FROM NEW WORLD AT 1-800-325-8898 OR 1-818-999-0607 OUTSIDE U.S.| P.O. BOX 4302 HOLLYWOOD, CA 90078-4302

© COPYRIGHT 1992 NEW WORLD COMPUTING, INC ★ MIGHT & MAGIC AND NEW WORLD COMPUTING ARE REGISTERED TRADEMARKS OF NEW WORLD COMPUTING, INC ★ IBM SCREENS SHOWN ACTUAL SCREENS MAY VARY

NEW WORLD COMPUTING™

Circle 12 on Reader Service Card.

CONTENTS

6 **EDITOR'S PAGE**
"Recipe for Success" by Dan Muse

8 **MAILBAG**

10 **THE GAME PRESERVE**
by Dan Muse and Wes Nihei

16 **TOP GUN**
"Taking Control" by Cameron Crotty

18 **ROLE CALL**
"Balancing Act" by Bernie Yee

22 **SPORTS PAGE**
"All in the Stats" by Wayne Kawamoto

24 **YOU ARE THERE**
"Whistle-Stops" by Peter Olafson

26 **CHILD'S PLAY**
"Hidden Resources" by Gregg Keizer

30 **PERIPHERAL VISION**
"Sound Investments" by Barry Brenesal

32 **SNEAK PEEKS**
Crisis in the Kremlin * Just Grandma and Me

64 **PCG REVIEWS**
The Next President * Uncharted Waters * PC Comix: Lance Stone * NFL Pro League Football * All-American College Football * MiG-29 Fulcrum * Matrix Cubed * Hoyle Official Book of Games: Volume 3 * Creative Labs Multimedia Upgrade Kit * Wild Wheels * SimCity for Windows * Mixed Up Fairy Tales * Metrognomes' Music * Magic Candle II * Annabel's Dream of Ancient Egypt * Al Michaels Announces: HardBall III * NFL

87 **DESIGNERS' NOTES**
"New Perspectives"
by Mike Suarez

88 **EDITORS' CHOICE**
"Zen Moments"
by Cynthia E. Field

p. 67

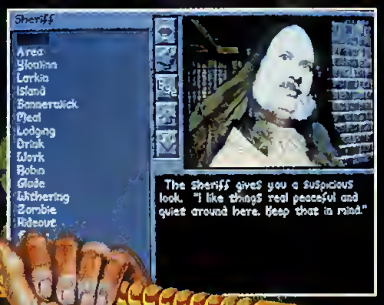
p. 22

p. 87

p. 56

RAISE SOME SPIRITS.

Elevate yourself to a higher level of fantasy gaming and play *PROPHECY OF THE SHADOW.*



IBM VGA DISPLAYS

SSI's latest role-playing adventure boasts stunning digitized art and animation, a dynamite soundtrack and colorful sound effects. It's fast and easy to play, thanks to point-and-click icon-based commands, graphical inventories and conversation interface. As you search for the way to prevent an ancient prophecy from coming true, you'll cast magic spells, solve puzzles, explore dark dungeons, battle monsters and encounter the long-dead. All of which you'll find quite uplifting.

PROPHECY OF THE SHADOW™

A SINGLE-CHARACTER ROLE-PLAYING ADVENTURE!

To order by VISA/MC: call **1-800-245-4525** (in USA & Canada).

To receive SSI's complete product catalog, send $1.00 to: **SSI**, 675 Almanor Ave., Suite 201, Sunnyvale, CA 94086.

1992 Strategic Simulations, Inc. All rights reserved.

IBM
AMIGA
Clue Book available!

STRATEGIC SIMULATIONS, INC.®

EDITOR'S PAGE

RECIPE FOR SUCCESS

Remember that commercial in which a peanut-butter lover bumps into a chocolate junkie? Somehow the peanut-butter and chocolate get mixed together; synergy follows and Reese's Peanut Butter Cups becomes a legend.

For years educational-software publishers and entertainment-software companies traveled down the road the way the couple in the Reese's commercial does — with their heads down and minds closed. Entertainment companies grimaced at the word "education." Education companies resisted the word "game" as a scarlet label. Sure, a spelling or math program might have a game element here and there, but there was software for learning and software for playing.

I didn't actually see it happen, but somewhere along the line, education and entertainment collided and everything got mixed. "You got entertainment in my education software," cried one faction. "No, you got education in my entertainment software," the other protested. They sold it anyway, and the result was a combination almost as appealing as chocolate and peanut butter.

The new recipe seems to be working. At this summer's Consumer Electronics Show in Chicago — historically an event for the entertainment market — we saw companies that used to be categorized as education publishers getting more serious about games. Companies such as Davidson & Associates, The Learning Company, MECC, and Broderbund will probably never offer a fantasy role-playing game or a flight simulator, but they're taking games seriously. Their games are aimed at kids, but the new approach is that kids will learn if they're having fun.

To give credit where it's due, Broderbund was probably the first company to come up with a product that defied categorization. The Carmen Sandiego titles are games to some and education tools to others. But it doesn't matter what you call them: Kids love them and will play them, and learn from them, for hours. Carmen continues to travel to far-off places, and the games continue to sell off the shelves. Carmen even has her own TV program now.

Today, Broderbund's competitors offer products that are as fun and educational as Carmen. Davidson's Headline Harry and The Learning Company's Super Solvers series come to mind as worthy competitors, but there are many more. And Carmen is no slouch herself. As technology improves, so does Carmen.

On the chocolate side, role-playing games and sports and flight simulations still abound, but publishers are also seeing the education potential of entertainment. For example, companies with pure-entertainment pedigrees such as Konami (in conjunction with Spirit of Discovery) and Accolade now offer products that fall into the "edutainment" category.

Just as chocolate and peanut butter taste great together, software publishers realize that there doesn't have to be a wall between fun and learning. Now if we can only think of a better buzzword than *edutainment* . . . .

— Dan Muse, Editor in Chief

PC GAMES

President/Publisher ..... **Paul Boulé**

Editor in Chief ..... **Dan Muse**
Consulting Editor ..... **Gregg Keizer**
Executive Editor ..... **Eileen T. Terrill**
Associate Editor ..... **Carla SlatonBarker**
Associate Editor ..... **Cameron Crotty**
Editorial Assistant ..... **Jan Cote**
West Coast Editor ..... **Wes Nihei**

DESIGN

Art Director ..... **John Sizing**
Editorial Designer ..... **Dianne Ritson**
DTP/Macintosh Manager ..... **Doreen Means**

PRODUCTION

Production Director ..... **Sue Gross**

ADVERTISING
80 Elm Street
Peterborough, NH 03458
(800) 441-4403

National Advertising Director ..... **Sanford L. Fibish**
Sales Representative ..... **Kevin Gasper**
Advertising Coordinator ..... **Mary Hartwell**
Administrative Assistant ..... **Lisa Benway-Caron**

CIRCULATION

Director of Operations and Circulation ..... **Megan Lane**
Single-Copy Sales Director ..... **George Clark**
(415) 978-3301
Circulation Manager ..... **Laurie K. Seamans**
Fulfillment Manager ..... **Cecile Giguere**
Fulfillment Assistant ..... **Jill Wood**
Customer Service ..... **(800) 343-0728**

MARKETING SERVICES/PROMOTION

Director of Marketing ..... **Peg Brown**
Marketing Assistant ..... **Rita Rivard**

PCGames (ISSN 1042-2943) is a buyer's guide to MS-DOS entertainment software, published eight times each year by A+ Publishing, a subsidiary of Macworld Communications, 80 Elm Street, Peterborough, NH 03458. Subscription phone (800) 343-0728. Nationally distributed by Kable News. Second-class postage pending at Peterborough, New Hampshire, and additional mailing offices. POSTMASTER: Send address changes to PCGames, 80 Elm Street, Peterborough, NH 03458. Editorial and production offices at 80 Elm Street, Peterborough, NH 03458, (603) 924-0100.

Entire contents of this issue copyright 1992 by A+ Publishing. No part of this publication may be printed or reproduced without written permission from the publisher. PCGames makes every effort to ensure the accuracy of articles published in the magazine and assumes no responsibility for damages as a result of errors or omissions.

Rex Nebular is on his way!

MICROPROSE™
ENTERTAINMENT • SOFTWARE

©1992 MicroProse Software, Inc. ALL RIGHTS RESERVED.

1-800-879-PLAY

Circle 11 on Reader Service Card.

MAILBAG

Draft Picks

I have a question for you gaming pros. What's the best PC football game on the market right now? I'm looking for great graphics, arcade action, and good sound effects, without losing playability. A variety of plays to choose from, along with all the technical stuff such as weather, injuries, penalties, substitutions, fatigue, hurry-up offense, choice of stadium, two-minute drill, and a wide range of adjustable player attributes, would also be pluses.

A coaching perspective would be nice, but I like to get into the action and run the quarterback around the end and hand off to a wide receiver running a reverse. Being able to control the guys on the field is the most important thing for me.

Matt Bailey
6504 114th Avenue Northeast
Kirkland, WA 98033

You'll find three of the newest football games on the market profiled in this issue of PCGames*: **NFL Pro League Football** and **All-American College Football** (Micro Sports, Hixson, TN/615-843-3040, $79.95 and $59.95 respectively) on p. 68, and **NFL** (Konami, Buffalo Grove, IL/708-215-5111, $49.95) on p. 85.*

According to our reviewer, NFL Pro League and All-American College Football emphasize statistics (140 categories), highlighted by coaching and game-plan formulation. Graphics and action are no great shakes — just the basics. Konami's NFL, on the other hand, has great graphics images. There's also a coaching-only mode and a playbook editor.

*In our November 1991 issue (p. 43), our reviewer called **Mike Ditka Ultimate Football** (Accolade, San Jose, CA/408-985-1700, $54.95) "the perfect blend of strategy and action for the armchair quarterback," with detailed graphics and a choice between predefined teams and control of individual player attributes.*

*Also reviewed in that issue is **Playmaker Football**, a package from Broderbund Software (Novato, CA/800-521-6263, $49.95), a coaching simulation "for the brain, not the fingers." Although graphics images and animation are somewhat awkward-looking, the game's strategic details and low-level artificial intelligence make it noteworthy.*

*Also worth checking out at your local software store are **John Madden Football II**, due out in September from Electronic Arts (San Mateo, CA/415-571-7171, $49.95) and **Joe Montana Football**, from Sega (Redwood City, CA/415-508-2800). According to this issue's Game Preserve (p. 11), John Madden II features excellent animation and new playbooks. The Joe Montana package now includes a new disk containing six extra playbooks.*

*In addition, Data East offers **ABC Monday Night Football** (San Jose, CA/408-286-7074, $49.95), reviewed here in "An Endless Season," September/October 1991, p. 33. TV-style perspectives and clear graphics make it easy on the eyes. On offense, you control the quarterback and any intended receiver; on defense, you control the player closest to the ball carrier. As for strategy, you can adjust each player's attributes; the game also includes a variety of plays and formations, but you can design your own, as well, and save them in a playbook.*

*Also on the market is **MicroLeague Football: The Coach's Challenge**, from MicroLeague Sports (Newark, DE/302-368-9990), mentioned in The Game Preserve, November 1991, p. 9. A* Deluxe Version *($69.95) includes* General Manager/Owner *and* MicroLeague Season *disks with current and past team rosters and stats.* — *eds.*

Fed Up

I'm an avid computer-game player, and I've always admired computer games for being one step ahead of game systems. But game designers are still living in the past about one thing: copy protection. They're still using it — more than ever, in fact. And the new protection schemes are enough to drive a person to drink.

Copy protection has never stopped a determined pirate or hacker. The only thing copy protection accomplishes is hurting honest users. Who wants to have to look up a word in the game manual or mess with a key disk every time you want to play a favorite game?

A minor inconvenience, some might say, but think about it. Imagine, if you will, coming home from work or school one afternoon, ready to play a round of Final Orbit. You're about to turn on the computer — when you see your baby or your kid brother sitting on the floor ripping out the pages of the manual. Or maybe the dog's biting the key disk from your King's Quest package. No manual, no game. No disk, no game.

Pretty bleak, isn't it? If any of you game players out there are as fed up with this as I am, don't hesitate to speak out. Maybe one day someone will hear you.

Jake Landrum
P.O. Box 499
Pittsburg, TX 75686

If you have comments, questions, or suggestions, write and let us know what you're thinking. We reserve the right to edit letters for clarity, style, and space. Address your correspondence to Mailbag, PCGames, 80 Elm Street, Peterborough, NH 03458.

PC GAMES
The disk !

3 great ways to build a fantastic game library without breaking your budget...

1 PLAY SPADES AND CHECKERS AGAINST YOUR COMPUTER • Card game Concentration • Tennis and Squash • Build your vocabulary with Hangman and Wordsearch • Five-Straight

2 PRACTICE INTERGALACTIC HIGH FINANCE WITH TRADER - BUY ON ONE PLANET, SELL ON ANOTHER • Battleship • Sixteen Puzzle • Towers of Hanoi • Repeat the musical tone sequence

3 KNOCK DOWN THE WIZARD WALL AND RESCUE THE BEAUTIFUL PRINCESS - MULTIPLE LEVELS • Play 3-D Tic-Tac-Toe • Computerized Darts • BINGO • Gather emeralds as you find your way through the Treasure Maze • Strain your brain with puzzles from Mensa ® USA • WORDSEARCH

4 CONTROL ANGLE AND SPEED AS YOU PLAY COMPUTERIZED MINIATURE GOLF • Don your armor, lower your lance, and Joust against Sir Azure • Decipher cryptic license plates with California Challenge • Crazy Ball • Mind Master logic puzzle • More mindbending puzzles from Mensa ® USA • Mini-Golf Wordsearch

5 STAY ON THE ROAD AND AHEAD OF YOUR OPPONENTS IN EXCITING BIKE RACE • Play ancient Japanese strategy game against a friend or the computer • DOMINO PUZZLE • SPECIAL DAYS demo - event from days gone by • More Mensa ® USA puzzles

6 VICIOUS KILLER WORMS ARE TAKING OVER YOUR LAWN! • EMERGENCY MISSION • Match wits with your computer in a new strategy game • JIGSAW PUZZLES • More mind bogglers from Mensa ®

7 FIND YOUR WAY THROUGH THE LABYRINTH OF DOOM • SCRAMBLE • FIRE AND ICE • QUOTABLES • More Mensa ® USA

8 ENJOY ANCIENT, ENTERTAINING BOARD GAME NINE MEN'S MORRIS • ACES HIGH • TANGRAMS • CONNECT THE DOTS • PICK-A-PEG • Mensa ® Puzzles

9 HOP Q-WABBIT TO SAFETY - FAST MOVING ARCADE GAME • PACHISI • Ancient mariners' dice game Shut the Box • Solitaire-type game Pharaoh's Pyramid • WORDFALL

10 TV TRIVIA • BACKGAMMON • DOMINOES • GIN RUMMY • PUZZLES • WORDSEARCH • QUATRIS Arcade type game

11 ROULET • SLOTS • CRAPS • KENO • BLACKJACK • MENSA ® • PUZZLES • GAMBLING WORDSEARCH

12 ***BEST OF THE 80'S*** • SPADES • S.O.S.-a word game • MICROPUTT - miniature golf • BINDOG • CONQUER (Othello) • WORDSEARCH

---

3 FOR $19.95 ☐ ☐ ☐

6 FOR $29.95 ☐ ☐ ☐ ☐ ☐ ☐

12 FOR $49.95 ☐ ☐ ☐ ☐ ☐ ☐
☐ ☐ ☐ ☐ ☐ ☐

INDICATE YOUR SELECTIONS BY NUMBER IN THE BOXES PROVIDED.

5 1/4 " DISK ONLY

PC GAMES
333 Texas Street, Suite 2376
Shreveport, LA 71101-5304

318 / 222-8088

CREDIT CARD ORDERS ONLY

PCGames and *PC Games* the entertainment disk are two great products from two separate companies, both dedicated to bringing you the best in entertainment software.

THE GAME PRESERVE

NEW FRONTIERS FOR SSI

Big news from Strategic Simulations (Sunnyvale, CA): The company is launching two games with new 16-bit engines — the first since Pool of Radiance's and the Gold Box series' 8-bit engines — plus a naval-battle game unlike any of its other historical-warfare products.

Dark Sun: Shattered Lands jumps straight from the best-selling Advanced Dungeons & Dragons fantasy role-playing board game from TSR into your home PC. The Sorcerer King rules a harsh desert universe.

Your job is to build up and lead a four-character party as you escape from the city, organize other escaped slaves, and fight the Sorcerer King's army. With 200 spells at your command, including new psionic powers and mental telepathy, you'll visit 20 regions.

Game action features real-time play as well as SSI's dependable phase-combat system. Hand-rendered graphics make this one a knockout. A compact-disc version is in the works for '93.

M is SSI's foray into out-of-this-world science-fiction role play. You'll direct an undercover team traveling to the planet Monsoon to free kidnapped diplomats. This land's life-supporting surfaces are a series of raised plateaus surrounded by poisonous clouds.

M features stunning graphics images (all CAD-rendered), with cinematic drama and weird scaling effects. You control your four characters and a robot via a point-and-click interface and a full-screen overhead view.

Great Naval Battles: Command the British or German fleet.

Great Naval Battles: North Atlantic 1939–1943 puts either the British or the German North Atlantic fleet at your command during World War II. You can play a tactical naval campaign or engage in ship-to-ship battles.

You'll go on maneuvers, choose batteries, and manage damage control — and you may even have to issue the command to abandon ship.

Historical accuracy is a highlight: All battles and situations are based on actual encounters and convoy shipping dates, and you'll be fighting computer counterparts of real ships piloted by their actual commanders.

For more information, call SSI at (408) 737-6800. **— W.N.**

ON-LINE SAVINGS

The Sierra Network, an on-line service for PC game enthusiasts, recently announced a new flat-rate subscription.

For $12.95, subscribers can play TSN's **Constant Companion** board and card games, featuring chess, checkers, bridge, cribbage, and more (played with real people in real time), for up to 30 evening and weekend hours. Options for play time of more than 30 hours per month are also available.

For more information, contact The Sierra Network (Coarsegold, CA) at (209) 642-0700. **— D.M.**

EA'S GOOD SPORTS

Electronic Arts (San Mateo, CA) is ready for today's computer-sports nuts. The Olympic games are the hot sports news of the year, of course, and the athletes at EA are primed for action.

Team U.S.A. Basketball features an international competition with America's NBA All-Star Olympic team. This game uses the same engine as Lakers vs. Celtics and, like that title, sports graphics images of real-life players. And if you pay attention to TV coverage of the Olympics, you'll notice that EA even copied the European players, too.

The NBA players' performances are based on their '90–'91 statistics. That taste of realism also applies to players such as Vlade Divac of the Los Angeles Lakers and Sarunas Marciulionis of the Golden State Warriors, who play for other Olympic teams.

All players show their signature moves or dunks, too. Team U.S.A. also includes brief background information on all competing countries.

Michael Jordan In-Flight deserves another mention in The Game Preserve. This

three-on-three basketball game is slated to appear in October. It mixes sports action with flight-simulator features — maybe the only way to simulate His Airness' awesome on-court moves. (For more on Jordan In-Flight from the viewpoint of the game's author, check out "New Perspectives," this month's Designers' Notes, p. 87.)

John Madden Football II should kick off this September. The game features enhancements all around the field. Graphics images now include great player animation — a welcome improvement over the original Madden Football's.

You'll also get new defensive and offensive playbooks from Coach Madden himself. You may find that the biggest boost of all, though, is in the quality of the computer competition.

For more information on the Electronic Arts Sports Network, call EA at (415) 571-7171. — **W.N.**

MAXIS GOES ELFISHING

The company that brought you SimCity, SimEarth, and SimAnt is about to expand its creative focus from land to sea. Maxis Software's (Orinda, CA) **Elfish** is the new brainchild of Alexey Pazhitnov and Vladimir Pokhilkko, designers of Tetris.

Preliminary reports note that as in Maxis' other life simulations, Elfish lets you play God and produce totally unique animal forms, this time of the aquatic variety.

The program contains detailed animated graphics images of hundreds of fish species. You'll mate different types of fish or make them evolve; you can populate your seas with existing species, or for faster breeding you can pick and choose anatomical parts to build your own marine-life form. For details, contact Maxis at (415) 254-9700. — **W.N.**

CHECK!

PC chess packages just get better and better. Aficionados should be on the alert for two new games from Software Toolworks (Novato, CA) and Interplay (Santa Ana, CA).

In addition to a brand-new chess algorithm, Software Toolworks' **Chessmaster 3000** features snazzier graphics images,

THE ENVELOPE, PLEASE . . .

The motion-picture industry has the Oscars; the music industry, the Grammies; the theatre bix, the Tonys. But what about honors in the software industry? It's got something, too. It's big, it's bad, it's black-tie. It's the annual Software Publishers Association Excellence in Software Awards. Okay, it needs a catchier name. (How about the Kennies in honor of SPA director Ken Wasch? Nay.)

It may not roll off the tongue, but it's still a big deal. Like other industry awards, it takes a peer-selection approach. There's heavy lobbying, a lot of sentimental votes, but mostly good selections.

This year the spectacular was held in Seattle last March at the SPA's annual spring conference. Jon Lovitz of Saturday Night Live (yeah, that's the ticket) was master of ceremonies. Lovitz added the right amount of irreverence. Unlike some past hosts, he seems to have an understanding of the industry, or at least did a good job faking it. Some of his humor was slightly off-color, which received a mixed reaction among the 1000-plus attendees. (Rest assured that PCGames was seen rolling on the floor — well, almost — during the most-prurient jokes.)

And the winners are . . . Strategy program Civilization (top) tied with action/arcade title Lemmings (bottom) for SPA's best game product.

In the entertainment and "edutainment" categories the awards went as follows:

• **BEST NEW-PROGRAM USER INTERFACE** for the software program with the most intuitive, innovative way in which the user interacts with the computer: **KIOPIX from Broderbund Software, author Craig Hickman**

• **BEST FANTASY ROLE-PLAYING/ADVENTURE PROGRAM** for the best title that engages the user in a fantasy or role-playing environment: **MARTIAN MEMORANDUM from Access Software**

• **BEST SIMULATION** for the best program that simulates a real or imaginary situation: **SIMANT: THE ELECTRONIC ANT COLONY from Maxis Software, authors Will Wright and Justin McCormick**

• **BEST SPORTS PROGRAM** for the best program that simulates sports: **LINKS CHAMPIONSHIP COURSES from Access Software**

• **BEST HOME-LEARNING PROGRAM** for the best educational program designed for learning at home, but not limited to a particular age group: **WHERE IN AMERICA'S PAST IS CARMEN SANDIEGO? from Broderbund Software**

• **BEST ACTION/ARCADE PROGRAM** for the best new action/arcade program: **LEMMINGS from Psygnosis Limited, authors OMA Design**

• **BEST STRATEGY PROGRAM** for the best program that engages the user in strategic interaction: **SID MEIER'S CIVILIZATION from Microprose Software**

• **BEST ENTERTAINMENT PRODUCT** for the best home-entertainment program itiel: **SID MEIER'S CIVILIZATION from Microprose Software and LEMMINGS from Psygnosis Limited, authors OMA Design** — **O.M.**

Chessmaster 3000: a stronger, better-looking opponent.

additional moves, stronger computer opponents, and more learning tools.

The game follows U.S. Chess Federation rules. You can replay and analyze 150 of the greatest games in chess history, and there's a special interface that lets you connect with on-line chess databases. You can also set up a round-robin tournament for up to ten players.

Chessmaster lets you pause in mid-game to explore as many alternative moves as you like without interrupting your original line of play. At the end of a game, the program determines your chess rating.

For more information, contact Software Toolworks at (415) 883-3000.

Interplay's **Battle Chess 4000** also sports a new-and-improved algorithm — but it's the outstanding graphics images that add spice to this series. The latest entry sports pieces rendered in Claymation-style animation. For details, call (714) 545-9001. — **W.N.**

Check out the cool-looking pieces in Battle Chess 4000.

MECC ON THE MOVE

MECC (Minneapolis, MN), a company that has years of experience and success in education software, continues its push into more-mainstream markets with three products that feature fun, but also focus on learning.

In **Hero by Night** ($49.95), you play the role of an aspiring hero who attempts to right wrongdoing in a crime-infested city. Remember, though, that you're new to this stuff; in fact, it's your first night as an avenger.

Armed only with your little brother's security blanket for a cape, mom's kitchen gloves, and a new pair of galoshes, you bravely set out to take on evil.

Your goal is to prevent Mr. Big from crippling your city. He's hired a team of thugs to execute his diabolical plan. You must decipher clues and stop each of the thugs individually to save your hometown. A variety of criminals and cases are designed to keep the pace moving.

In **SnapDragon** ($49.95), children aged 3 to 6 join a camera-happy dragon and his teddy bear to explore the world of classification and grouping. Kids can visit six different locations — ranging from the depths of the sea to outer space — where they'll play with the objects they find there.

Objects can be sorted by size, shape, color, and more. After kids group items based on either objective or subjective criteria, they can ask SnapDragon to photograph the scene.

Pictures are stored in a photo album so that the child can go back and explain how he or she grouped the objects. The game also includes black-and-white pictures of SnapDragon that kids color either on or off screen.

In **Storybook Weaver** ($49.95), children aged 6 to 12 create their own storybooks by incorporating a variety of words, pictures, sounds, and music. In the picture window, kids can select from 468 scenery combinations to use as backdrops.

They can also pick from more than 650 objects — including people, story characters, real or make-believe animals, and more — representing a variety of cultures. Objects can be enlarged, reduced, flipped, and colored. Kids can also assign one of 36 different sounds to each object and select from 12 musical tunes to set the mood of the story.

Storybook Weaver features a story window with basic word-processing functions, such as cut and paste, and a selection of five fonts. It also includes a spelling option that lets a child go beyond his or her written vocabulary. If a child selects an object in the picture window, the word that coincides with that object is inserted into the story.

Kids have two ways to share their stories with others. They can print in one of three formats or distribute them electronically via compatible computers. The reader doesn't need to run the Storybook Weaver application to view kids' masterpieces.

Hero by Night, SnapDragon, and Storybook Weaver all require a hard-disk drive and support leading sound cards.

Zoo Keeper: so realistic you'll want to feed the animals.

For more information, contact MECC at (612) 569-1500. **— D.M.**

LIONS AND TIGERS AND BEARS

What provides a better combination of entertainment and education than a trip to the zoo? Davidson & Associates (Torrance, CA) lets kids take their love and curiosity about animals to another level with **Zoo Keeper** ($59.95).

Zoo Keeper is designed for 6- to -11-year-olds and takes an entertaining approach to teaching them about animals, their environments, and the importance of saving endangered species.

To get and keep the attention of young gamers, Zoo Keeper even features photos and sounds from the wild culled from the television show *Zoo Life with Jack Hanna* and *Zoo Life* magazine.

The young player begins the game as a temporary zookeeper at Zoo World. The goal is to work up through the ranks to the job of head zookeeper.

To reach this lofty position, the child must keep his or her animals happy and healthy. He or she must also release a variety of endangered species back to the wild.

At the center of the game is the zoo map, which consists of seven regions: deserts, forests and woodlands, grasslands, rainforests, mountains, polar regions, and oceans and rivers. Each region contains animals and environmental conditions indicative of that geographic area.

To investigate an animal, a world map shows where each animal is found in its native habitat throughout the world. Binoculars provide kids with a close-up digitized photo of each animal.

In an effort to save endangered species, Davidson & Associates will contribute $1 to an animal foundation (unnamed at press time) for each Zoo Keeper registration card returned. So, remember, folks, get those cards in the mail.

For more information, contact Davidson & Associates at (310) 793-0600. **— D.M.**

KIDPIX DOES WINDOWS

Broderbund's (Novato, CA) award-winning KidPix is now available in a Windows version.

Among **Kid Pix for Windows**' ($59.95) features are animated 3D buttons that remain depressed when clicked, helping kids remember which tool and color they're using.

The program also takes advantage of Windows' multimedia capabilities through its extensive use of sound. It supports any MPC-compatible sound card and Windows 3.0 with Multimedia Extensions or 3.1. Kids can add life to their creations by recording greetings, music, or sound effects.

For more information, contact Broderbund Software at (415) 382-4400. **— D.M.**

TO THE BAT CAVE

Konami (Buffalo Grove, IL) has secured the software rights to the movie ***Batman Returns*** and plans to ship a computer game of the same name this fall.

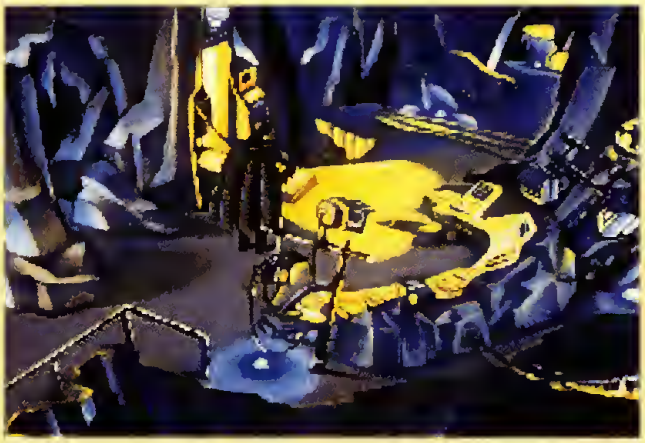
You'll guide Batman through the dark and gloomy streets of Gotham City as he battles infamous enemies such as the pesky Penguin and the curvacious Catwoman. You control Batman's Master Computer as it analyzes evidence, views news broadcasts, and investigates a biographical database of criminals.

Batman Returns, developed by Park Place Productions, features graphics designed to capture the dark mood of the movie.

In other game news, it seems as though Konami must really love football. (Well, it *is* based in the Midwest.) On the heels of the recently released NFL (see Reviews, p. 85) comes **NFL Video Master Football**, developed by Konami's publishing partner Spirit of Discovery. This one takes a unique approach to sports games: It uses actual video footage to enact game play. Licensed by the NFL, Video Master Football uses sequences from the organization's film library.

You have the option of playing a single game or an entire season, and, if you're ambitious, you can control all 28 teams simultaneously.

Broderbund's KidPix: more wonderful in Windows.



Konami's Batman Returns captures the mood of the movie.

You can switch from game to game to monitor how your teams are performing.

NFL Video Master Football also features digitized speech and customized playbooks.

Konami has once again teamed up with Renegade Software — and the fruit of that labor is **Fire and Ice**.

In Fire and Ice, Cool Coyote battles the elements through seven worlds and 30 levels of play. The action culminates in a heated fight to the finish with the Fire Wizard.

Weapons consist of varying forms, ranging from ice bombs to rain. You can cool off the hot-tempered Fire Wizard by seeding clouds with ice bombs and forcing it to rain. Cool Coyote's most powerful weapon, however, is a blood-curdling howl that freezes and shatters anything in its path.

To advance, you must find pieces of each level's door key. Every piece is guarded by one of Fire Wizard's guards. You can neutralize them, though, by unleashing a pack of indestructible puppies.

Prices for the Konami games Batman Returns, NFL Video Master Football, and Fire and Ice weren't determined at press time. For information, contact Konami at (708) 215-5100. **— D.M.**

RUNNING WITH CARL LEWIS

Of all sports simulated in computer games, track and field has to rate as the most ignored. Now Psygnosis (Brookline, MA) plans to hurdle all obstacles in the way of producing a best-selling track and field game. It seems to have the ingredients of a winner: affiliation with a famous athlete and depiction of the details and complexities of the particular sport.

Carl Lewis Challenge ($49.95) features five events — javelin, 100-meter sprint, 400-meter hurdles, high jump, and long jump.

As in real-life track and field, the event itself is only a reflection of the success of the training program. In this simulation, you're in charge of your country's top ten athletes. You plan their training schedules over a five-week period, monitor their weekly training, and pick the top five athletes for international competition. Carl Lewis Challenge features digitized images of world-class athletes, digitized stereo sound, digitized action replay, and more.

If you'd rather save the world than trim seconds off the 100-meter dash, you may prefer Psygnosis' **Armour-Geddon** ($49.95). A sinister alien power has developed an energy-beam weapon capable of destroying all unprotected life on earth. You're in charge of a sophisticated weapons system, and your mission is to destroy that beam.

You control six vehicles: light tank, heavy tank, hovercraft, stealth fighter, stealth bomber, and helicopter. You can arm your craft with missiles, rockets, shells, and lasers.

You can also use your team of engineers and scientists to develop certain more-exotic devices, such as night sight, extra fuel tanks, cloakers, teleports, and so on. You can even create your own elaborate high-tech weaponry from parts you salvage from defeated enemies.

You take in the action from a first-person perspective inside each vehicle, or from a number of exterior angles, including a satellite view. Your battlefield is made up of complex real-time 3D forms.

For fans of those cute little critters with a penchant for self-destruction, Lemmings has been a mega hit — but you probably figure you've saved your last tiny green-haired conformist. Not so.

Oh No! More Lemmings ($49.95) offers 100 new adventures. So prepare yourself to save the little guys a few more hundred times this year.

For more information on Carl Lewis Challenge, Armour-Geddon, or Oh No! More Lemmings, contact Psygnosis at (617) 731-3553. **— D.M.**

1500 GAMES FOR $69.95?

The Digital Publishing Company (Golden Valley, MN) is making an offer that's tough to refuse — 1500 games on a CD-ROM disc for the retail price of $69.95. That means for each game you're paying only . . . well, you figure it out.

PC Game Room is made up of shareware and public-domain software in 17 categories, including flight simulation, golf, sports, word puzzles, and so on. There's also a special section just for kids.

The software features a colorful user interface with pull-down menus designed to make it easy to review each program and copy it to the appropriate drive.

For $76 (the extra $7 is a shipping and handling charge), you can order the game directly. Call (800) 279-6099. **— D.M.**

STAY TUNED

Look for announcements and reviews of more new games from Chicago's Summer Consumer Electronics Show in the next issue of *PCGames*, on sale mid-September.

We've just extended your flight plan.

Now Falcon 3.0™ takes you places you've never flown before.

Operation: Fighting Tiger™ takes you on action-packed missions in three new Asian campaigns. Fly your F-16 to Korea, to the Pakistan/India border, to Japan and the disputed Kurile Islands, where you can also fly the advanced FSX. The incredible scope of Falcon 3.0 delivers everything from Instant Action arcade excitement to plotting your own Red Flag training missions to engaging in a dramatically different campaign every time you play. The flight models and terrain are real. The radar and weapons are real. The enemies, missions and campaigns nothing less than spine-tingling. Joining forces with the most sophisticated flight simulation of all time, Operation: Fighting Tiger broadens your horizons as never before. And makes the wild blue yonder a whole lot wilder.

Operation: Fighting Tiger requires Falcon 3.0

For Visa/MasterCard orders call 24 hours a day, 7 days a week 1-800-895-GAME (Orders Only)

For technical questions and availability call: 1-510-522-1164 (M-F 9am–5pm PST)

Operation: Fighting Tiger and Falcon 3.0 are trademarks and Spectrum HoloByte is a registered trademark of Sphere, Inc

Spectrum HoloByte®

A Division of Sphere, Inc. 2061 Challenger Drive, Alameda, CA 94501

Circle 36 on Reader Service Card.

TOP GUN

TAKING CONTROL

Flying for real and realistic flight are two different things.

By Cameron Crotty

Jeez, that doesn't look so hard! Famous last words, courtesy of the makers of PC simulators.

You know you've been sitting in front of a PC too long when you decide you're ready for your private pilot's license just because you wasted five Luftwaffe aces over Britain. Not so, Jack. Getting a real license requires physical fitness, a ton of ground instruction, and hours of flight time.

Even though you can't apply the thousands of hours you've logged in virtual aircraft, you can still get up in the air if you've got that need for speed. The FAA recently approved the Recreational Pilot Certificate (RPC), an alternative to the costly and time-consuming Private Pilot Certificate (PPC). It's perfect for the armchair pilot who's itching to try out the real thing. For more details, see the accompanying sidebar, "Getting Your License."

But if your checkbook can't take the heat, and you don't exactly itch to fly for real, there's a consolation prize for the fear-of-reality pilot — specialized flight controllers for the PC.

Neat idea, not ready for prime time: Colorado Spectrum's Mouse Yoke.

POWER AT YOUR FINGERTIPS

Whether you're setting a Boeing 747 on the ground or doing Mach 2 upside down, it never hurts to have the proper tools. Better desktop-flight controls take a lot less money than real flying lessons, but they make the experience a lot closer to the real thing. What say we push the grocery cart into the PC peripherals aisle?

For years, game-control designers created devices that plugged into the game (joystick) port. That may seem like a sensible approach until you consider the myriad controller possibilities available in different flight programs. Developers have been experimenting recently with alternative pathways — such as building controllers around already-existing software.

Most flight simulators force you to fly with one hand on the joystick and one hand dancing across the keyboard like Thing from *The Addams Family*. Slamming your throttle into afterburner detente loses something in translation when you wind up pressing F10 instead.

Enter the Thrustmaster Weapons Control System and Flight Control System for the serious hair-on-fire crowd. Is that you?

The **Weapons Control System** looks like a jet-fighter throttle control, complete with a handful of buttons under your fingertips. Once you grab on, you don't have to let go of this stick until you or the bad guys are dead and gone.

The Weapons Control System plugs into your PC's keyboard port and sends signals that correspond to keystroke commands for the flight simulator's throttle movements and button clicks. DIP-switch settings on the Weapons Control System let you configure the controls for different simulators — everything from Electronic Arts' Chuck Yeager's Air Combat to Dynamix's just-released Aces of the Pacific. If you feel the need to leave the atmosphere behind, you can even use the Weapons Control System with Origin's Wing Commander.

Thrustmaster worked closely with every major flight developer to ensure that no matter what you're turning and burning, you can experience hands-on stick-and-throttle (HOSAT) flight, just like real jet-fighter aces. And because you plug the keyboard into the Weapons Control System, you can go straight back to work when you're finished in the air. Your word processor will never know the difference.

The companion to the Weapons Control System is the **Flight Control System**, a huge, contoured, pistol-

grip joystick with four buttons: one for your trigger finger, two for your thumb, and one for your little finger.

With the Flight Control System, you can cycle through targets, switch from air-to-air to air-to-ground weaponry, arm bombs, and fire your cannon without taking your hand from the stick. As if that weren't enough, the Flight Control System features a small, rounded mini-joystick for your thumb that lets you switch cockpit views without reaching for the function keys.

The Flight Control System comes with a patch for most Electronic Arts software that will enable this handy gadget. And, best of all, other game manufacturers are building this functionality into new packages, or at least, providing updates for old ones. (Check with your favorite flight-simulator publisher for details.)

TRIGGER-HAPPY JET JOCKEYS

Flying your favorite crate with the Weapons Control System/Flight Control System pair can be tricky at first, but once you're in the groove, you'll wonder how you ever did without.

This is especially true for Falcon 3.0 hot dogs. How many times have you slapped at the *E* key to toggle your ECM only to find that you missed, hit the *R* key, and killed your radar? Bad move when missiles are homing in — but it's Thrustmaster to the rescue.

(For more information on Thrustmaster's Weapons Control System and Flight Control System, see PCG Reviews, January/February 1992, p. 62.)

GETTING YOUR LICENSE

The Recreational Pilot Certificate is an entry-level license that lets beginning pilots fly homemade or relatively simple aircraft (must be less than 180 horsepower and carry fixed landing gear) within a 50-mile radius of small airports without control towers. Rather than focus on complex navigational, instrument, and air-traffic instruction, the RPC lets you complete basic training, with an emphasis on actual flight skills.

To qualify for RPC instruction, you must be at least 17 years old, speak English (or be subject to licensing restrictions), and hold at least a third-class medical certificate. You'll start with a student-pilot certificate, which requires ground and flight instruction, and pre-solo written and flight tests.

Once you've made it through the hoops, you need roughly 30 hours of flight time — 15 hours with an instructor and 15 hours of solo time — before you can try for your final written and flight tests. Compare this with the Private Pilot Certificate's 40 hours of flight time and the RPC looks pretty good.

There are drawbacks to the RPC. You can't fly in tower-controlled air spaces, and the only way to increase your 50-mile radius is to take instruction at another airport. Still, the reduced cost and time requirements of an RPC make actual flight a realistic dream for aerial armchair argonauts. — C.C.

DON'T LAUGH: IT'S NO YOKING MATTER

If you lean toward Learjets and Cessnas, a flight yoke and rudder pedals might be more your speed. They plug directly into your joystick port. It's tough to remember that you're sitting in a chair and not hopping hedges with an engine buzzing in your ear.

Rumor has it that CH Products is working on a yoke that's due out soon, but until then your best bet is the slick-looking **MAXX Yoke/Pedal System** from Maxximum Company.

Some PC pilots have been watching a new company called Colorado Spectrum. Its **Mouse Yoke** straps your PC's mouse to the top of a clamp, and a round plastic tube with yoke handles slides beneath the mouse, rolling the ball around. It's a neat idea, and, on paper, it looked to be a contender. Unfortunately, vigorous testing revealed flaws.

Mouse-controlled flight is kludgy at best, and the Mouse Yoke makes no allowances for the fact that a mouse is a continuous-motion device you can usually pick up and put back down on the desk.

If you want to pull a loop, you have to keep pulling back on the yoke until it slides out of the clamp; even then you might not make it all the way around.

My advice is to go with a yoke that plugs into your computer's game port — you just can't beat a control device that your PC monitors continuously.

PRODUCT INFORMATION

Flight Control System
Weapons Control System
Thrustmaster
10150 Southwest Nimbus Ave.
Suite E
Tigard, OR 97223
(503) 639-3200
$99.95 each

Mouse Yoke
Colorado Spectrum
748 Whalers Way
Suite E-201
Fort Collins, CO 80525
(303) 225-6929
(800) 238-5983 orders
$34.95

MAXX Yoke/Pedal System
Maxximum Company
205 20th Street South
Nampa, ID 83686
(800) 766-6299
$99.95/$64

THIS IS YOUR CAPTAIN SPEAKING

Attention, please. We're on final approach to Reality Central. Please fasten your control devices and check your wallets for any cash that may be missing.

All of us here hope you've enjoyed your flight on Fantasy Airlines. Persons who need help explaining their new purchases should consult the Fantasy Airlines representative waiting in the terminal. And, please, come back and see us sometime real soon. ❑

ROLE CALL

BALANCING ACT

Stop fighting and start thinking.

By Bernie Yee

I've been playing computer role-playing games a long time. In days long gone by, when role-playing games such as Eye of the Beholder were just dreams in their designers' eyes, I was playing adventures like Zork — games that minimized combat and maximized puzzle solving. Unfortunately, it seems that with a few new (and old) exceptions, never the twain shall meet.

LEFT BRAIN, RIGHT BRAIN

Understandably, computer role-playing games have always been slanted toward combat, and away from puzzles. Why? Because a computer is a left-brain kind of device, a number cruncher.

Human game masters can fabricate puzzles and acknowledge players who come up with creative ways of solving puzzles, but short of on-line game masters or sophisticated artificial intelligence, there's just no way your computer can duplicate that kind of problem solving.

Programmers may try to kludge it into a binary world, but it usually doesn't work.

Planet's Edge: something for thinkers and doers alike.

And what's number crunching best at? Combat, lots of combat. A computer can account for character dexterity, fatigue factors, armor class, encumbrance, even luck and karma (distilled to convenient numbers, of course) as it calculates damage points from a plasma-rifle blast or a conjured-up lightning bolt.

In the time it takes a human game master to solve one complicated round of combat, a computer can figure results for a dozen battles.

New lists of combat spells, scads of magical weapons, enchanted armor, and the sci-fi analogue of high-tech weaponry have sprung out of this aptitude, giving role-playing games a tremendous sense of diversity.

WHERE DID THINGS GO WRONG?

But it's gone astray. Many role-playing games, especially fantasy role-playing games, are now too heavily skewed toward combat. Puzzle-solving and non-player character interaction are at an unconscionable minimum.

The ultimate irony is that games like Advanced Dungeons & Dragons — clearly the genesis of fantasy role play on the PC — allowed game masters unlimited freedom in creating puzzles and challenges, while providing a simple combat and magic system.

The legacy on the computer side is less attractive, however. SSI's computer adaptations of the AD&D universe, for instance, leave out much of the puzzle solving. In fact, what's left of puzzle solving is simply linear — find the right key or map, or use the right magic talisman, then on to the next level.

Puzzles occupy only a small part of a typical SSI AD&D milieu. Combat, endless combat, is the name of the game.

ALL MUSCLE

In **Eye of the Beholder II: The Legend of Darkmoon**, the party soon encounters a room full of Skeleton Warriors, which vastly outnumber and overpower you. The only way to kill them?

First, save the game frequently. Second, lure some away and close the door to the room they lurk in. Kill two, go to another room, and sleep to recuperate. Wake up and go back and kill some more. Repeat until victory or you're sick of endless combat.

Even more annoying is the two-step killing technique. Attack, then sidestep. When the beholder moves, attack again, then sidestep again, never giving the beholder a chance to use its gaze weapons. Unrealistic and artificial.

To sum it up: Eye of the Beholder's puzzles are mostly of the find-the-right-key, find-the-secret-door, or press-the-proper-floor-trigger variety.

A few diverge from the pattern: The magic-mouth puzzle, which asks you to figure out what each mouth wants, is one example.

Still, most are linear, like the game, and there's only one answer — nowhere near the complexity that Zork purists enjoyed.

You'll find many of these exciting new features on our updated classics:

BACK & *Better* Than Ever!

NEW MAC FEATURES!

All MAC versions are System 7 compatible and available in color and black/white.

- Programmed by Apple specialists
- Magnate high score of best players
- Numerous player options
- Realistic digitized sound
- Multiple levels of skill

NEW WINDOWS™ FEATURES!

- Easier "point and click" interface
- Dazzling animations
- Incredible sound effects with SOUNDBLASTER™ sound
- Easy Windows installation
- Super VGA support and hi-resolution graphics

Windows is a trademark of Microsoft Corporation.

FEATURES LISTED FOR BOTH FORMATS MAY NOT BE AVAILABLE IN ALL VERSIONS OF EVERY GAME.
Monopoly® is a registered trademark of Tonka Corporation. ©1992 Parker Brothers, a division of Tonka Corporation. Risk® is a registered trademark of Tonka Corporation. ©1992 Parker Brothers, a division of Tonka Corporation. Rich Uncle® is a registered trademark of Tonka Corporation. © 1936 Parker Brothers, a division of Tonka Corporation

PARKER BROTHERS

Virgin® GAMES

Virgin is a registered trademark of Virgin Enterprises Ltd.

For pricing and orders, please call 800-VRG-N907. Visa, Mastercard, American Express and checks accepted.

936 Parker Brothers

Circle 64 on Reader Service Card.

The Gold Box series fares even worse. You can't walk three squares without some band of baddies jumping you in Pools of Darkness, for example.

Combat, combat, and more combat. What gives? Where are puzzles with the freshness and imagination of those in **Wasteland**, an old computer sci-fi role-playing game by Interplay, which let you travel inside a demented android's brain?

DON'T LOSE HOPE

Two excellent examples of a newer approach to the puzzle/combat balance problem are New World Computing's **Planet's Edge** and Origin Systems' recent hit **Ultima Underworld: The Stygian Abyss**.

In Planet's Edge, you'll find two quite distinct approaches to puzzle solving. The doorkeeper wants you to find and return a stolen molecular oscillator before he lets you through? Fine, go look for it.

If you can't find it, you can come back with blasters drawn and bully your way through. Both the brutish and the wily can solve the puzzle.

Underworld adopts a similar approach, but since you're the Avatar, you can't go around hacking away at non-player characters just to get what you want — it'll damage your karma.

You have to go on the obscure-item hunt to find favor with certain characters, which isn't so bad — it falls into the grand tradition of heroic deeds like the Grail Quest.

But for locked chests and certain doors, you can bash them down without looking for the key. Because Underworld holds so many keys, that keeps the game from degenerating into just another key hunt.

And even the abstract pull-the-right-lever puzzles in Underworld have multiple solutions. You can skip the puzzle, explore some more, and use a newly acquired Potion of Fly or Levitation spell to reach the inaccessible area.

Sir-Tech has a more-traditional approach to the problem. In **Bane of the Cosmic Forge**, gamers can type full sentences to non-player characters, which elicit certain vital reactions.

And Mindcraft's **Magic Candle 2** helps the gamer by providing a transcript of conversations, with key words highlighted.

Even the early reports of Ultima VII indicate that combat is de-emphasized, with interaction and puzzle solving more in the limelight, where it belongs.

NEW WORLDS

Combat is important, of course. After all, it's the stuff of which heroic legends, past and future, are made. But when a party dies repeatedly, or combat is so prevalent it gets tedious, then game designers need to stack the odds a little less in the gamer's favor.

As for puzzles, the one-true-path type should be avoided. Instead, designers should create puzzles that reward creative solutions, not just the obvious or intended answer.

That'll make your role-playing world a more-interesting, if less dangerous, place to play. ❑

PRODUCT INFORMATION

Bane of the Cosmic Forge
Sir-Tech Software
P.O. Box 245
Ogdensburg, NY 13669
(315) 393-6644
$59.95
640K IBM PC, Tandy, or compatible
requires two floppy drives or hard-disk drive
monochrome, CGA, EGA, VGA, Tandy 16-color
supports AdLib, SoundBlaster, Sound Master, Voice Master

Eye of the Beholder II: The Legend of Darkmoon
Strategic Simulations, Inc.
675 Almanor Ave.
Suite 201
Sunnyvale, CA 94086
(408) 737-6800
$59.95
640K IBM PC, Tandy, or compatible
requires 286 or higher
EGA, VGA, MCGA
DOS 3.2 or later
supports AdLib, SoundBlaster
requires hard-disk drive
mouse recommended

Magic Candle 2
Mindcraft Software
2291 205th St.
Suite 201
Torrance, CA 90501
(800) 525-4933
$59.95
512K IBM PC, Tandy, or compatible
8MHz or faster recommended
EGA, VGA, Tandy 16-color
requires hard-disk drive
supports AdLib, Roland, SoundBlaster

Planet's Edge
New World Computing
20301 Ventura Blvd.
Suite 200
Woodland Hills, CA 91364
(818) 999-0606
$59.95
640K IBM PC, Tandy, or compatible
EGA, VGA
supports AdLib, Pro Audio-Spectrum, Roland, Sound-Blaster, SoundBlaster Pro, Thunderboard, Tandy sound
requires hard-disk drive

Ultima Underworld: The Stygian Abyss
Origin Systems
P.O. Box 161750
Austin, TX 78716
(800) 999-4939
$79.95
1MB IBM PC, Tandy, or compatible
requires 286 or higher, 386 recommended
VGA
DOS 2.1 or later
supports AdLib, Roland MT-32/LAPC-1, SoundBlaster
requires hard-disk drive, 14MB free

Wasteland
(nterplay Productions
3710 South Susan
Suite 100
Santa Ana, CA 92704
(714) 549-2411
(800) 969-GAME
discontinued
limited quantities may be available from mail-order sources

Better Equipment. Better Sound.

FREE Electronic Arts "4D Boxing" Special Offer

Forget primitive monkey-see-monkey-do technology like Sound Blaster* and AdLib*. Today, even a chimp can hear the difference, between the tinny, toy-box mono of older cards, and ATI's big-as-life *stereo* sound.

Stereo Sound

The fact is, ATI sound cards make monkeys out of the competition. They give you crystal-clear CD-quality sound at sampling rates up to 44 kHz, and add stereo separation to your existing mono software applications and games. They even let you play and record your own stereo sound files.

Software Compatibility

Let yourself really go bananas with ATI's 11-voice FM synthesizer and digital sound support. Full compatibility with Sound Blaster* and AdLib* lets you hack your way through the jungle of games and multimedia software, in DOS or Windows. Our bundled software, including MIDI editing and playback utilities, is more fun than a barrel of monkeys - and a lot more useful.

High Speed Joystick Port

Why let the older type of joystick port throw a monkey wrench into your gaming, with erratic response on today's fast 386 and 486 computers. Our stereo cards let the gamer in you really go ape, with a built-in multi-speed adjustable joystick port that works smoothly on any PC.

Don't add mono sound to your PC when you can have stereo. Ask for ATI, ask for STEREO•F/X and hear the difference.

STEREO•F/X

Superior stereo sound, with multi-speed game port. MIDI port optional.

VGASTEREO•F/X

Same great stereo sound, with multi-speed game port and MIDI as standard equipment, *plus* ATI's award-winning VGAWONDER XL graphics - all on a single card.

ATI TECHNOLOGIES INC.

Perfecting the PC

ATI TECHNOLOGIES INC.,
3761 Victoria Park Avenue,
Scarborough, Ontario,
Canada M1W 3S2
Tel: (416) 756-0718
Fax: (416) 756-0720

Copyright © ATI Technologies Inc., 1992. All company and/or product names are trademarks and/or registered trademarks of their respective manufacturers.

Circle 22 on Reader Service Card.

SPORTS PAGE

IT'S ALL IN THE STATS

Can sports games predict the future? Will they replace Vegas bookies? PCGames polls three top-notch baseball packages to find out.

By Wayne Kawamoto

Now that he's facing players who were wearing diapers when he began pitching in the majors, can Nolan Ryan have another good season? Will Roger Clemens win the Cy Young again? Can Detroit's Rob Deer become the all-time strike-out leader among batters? Will Sparky give him the chance?

Like catching a wild knuckleball, statistical baseball games for the PC try to predict that, and much more. Sports Page asked the creators of **Earl Weaver Baseball II**, **MicroLeague Baseball 4/*USA Today* Edition**, and **Tony La Russa's Ultimate Baseball** to step up to the plate with their software and predict the 1992 division, pennant, and World Series winners. The sluggers dug in and took their cuts. The results, as you'll see, are interesting.

YOU'RE NO TOMMY LASORDA

Statistical baseball games — part database, part probability machine, part crystal ball — use averages and statistics to project the performance of major-league players and teams. They try to treat America's pastime as a science. But their predictions are only educated best guesses. After all, who would have picked the Minnesota Twins and Atlanta Braves for the World Series last year?

Tony La Russa's Ultimate Baseball features graphics that appeal to the eye and AI that appeals to the mind.

In statistics-based games such as these three, you coach your favorite major-league team to see whether or not your decisions can change the outcome. You arrange the lineups, assign starting pitchers, make the call to the bullpen, select pinch hitters, coach the base runners, signal a bunt, call for a hit-and-run play, set the defense, and more. If you've always thought that you could better Tommy Lasorda, then these games are for you.

Stat games on the PC are direct descendants of popular baseball board games like APBA and Strat-o-Matic. Through the use of player stat cards, die rolls, and various charts, you played out baseball games and seasons based on the real statistics. Today, the computer's random generator replaces dice, and databases and indexes replace cards and charts.

TO EACH ITS OWN

When it comes to stats, each game plays by its own set of assumptions and mathematical formulas. In addition to batting averages, ERAs, home runs, RBIs, stolen bases, and errors, these games take into account everything from right- and left-handed pitchers against right- and left-handed batters to home-field advantage.

It's not uncommon for such assumptions, particularly when they deal with something as subjective as players' ratings, to be controversial. Some of that controversy comes from judgment calls on things such as a fielder's speed and throwing arm, factors for which no stats exist.

GET REAL

Another issue in today's games is biased averages. Mark Burgraff writes baseball software and is creating a baseball league on the on-line service CompuServe. "Player usage is important," he says. "All you have to work with is actual at-bats." For realistic results, you can't constantly play a batter who hit .400 with only 20 visits to the plate. In Burgraff's opinion, he would allow at-bats that are within only 15 percent of those of the real player's.

Burgraff feels another key issue is the "integrity of the computer manager. If he manages like a computer, you don't get real results." It's a real challenge for today's game designers to create computer managers that can make decisions like the real thing, not like robots.

STATS AND STREAKS

As we noted above, the three games that call the shots here all owe a debt to board games such as APBA,

STATS PICK SERIES

National League	American League	World Series
Earl Weaver Baseball II Pittsburgh, Atlanta	Toronto, Minnesota	Toronto vs. Pittsburgh or Atlanta no winner selected
MicroLeague Baseball 4/ USA Today Edition St. Louis, Atlanta	Toronto, Seattle	Toronto vs. Atlanta/Toronto wins, 4-1
Tony La Russa's Ultimate Baseball Pittsburgh, Atlanta	Toronto, Texas	Pittsburgh vs. Texas/Pittsburgh wins

a comprehensive package that's evolved over the last 40 years to include more than 60 player ratings. APBA comes in a computer form now, too, and serves as a perfect example of baseball software that's more statistics than graphics. In fact, APBA's action and outcome are conveyed in a text commentary, much like reading a transcript of a radio broadcast. It works well, and there's a surprising amount of anticipation as you wait for the results.

Earl Weaver Baseball II accounts for 50 different hitter/fielder stats and 30 pitcher stats, while Tony La Russa's Ultimate Baseball uses some 49 batting, 14 fielding, and 44 pitching categories. Both games emphasize detailed graphics (Tony's are better, though) and offer optional arcade action as well. They're also similar in that they both use pure physics to determine the outcome of a batter's hit.

Tony La Russa's Ultimate Baseball has broken new and controversial ground with what the game's authors call "streak." In this case, a streak has nothing to do with a 1970s-style exhibitionist college prank. It's an algorithm that accounts for a player's hot and cold streaks throughout a season. For example, Reggie Jackson was nicknamed "Mr. October" because you could count on him to be "on" late in the year, even if his stats for the rest of the season weren't impressive.

MicroLeague Baseball 4/ *USA Today* Edition and its companion *Analyst*, use "time-tested sabermetric principles and established computer models" to project outcomes of the games. This version features digitized animations of live major-league players to perform the action. You can also program the computer coaches to determine how aggressively they manage their teams. Do you want to steal bases and gamble on the base paths? Or you want to be like Earl Weaver himself and wait for the three-run homer? For up-to-date stats, MicroLeague has arrangements with the *USA Today* Sports Center so that you can download weekly statistics.

PRODUCT INFORMATION

Earl Weaver Baseball II
Electronic Arts
1450 Fashion Island Blvd.
San Mateo, CA 94404
(415) 571-7171
$49.95
$29.95 Commissioner's Disk II
$19.95 1990 MLBPA Player Stats & Manager Profiles Disk
512K IBM PC or compatible, 640K Tandy
EGA, VGA, Tandy 16-color
supports AdLib, Roland

MicroLeague Baseball 4/ USA Today Edition
MicroLeague Sports
2201 Drummond Plaza
Newark, DE 19711
(302) 368-9990
$49.95
$39.95 MicroLeague Baseball Analyst
$29.95 GM/Owner
640K IBM PC, Tandy, or compatible
EGA, VGA, Tandy 16-color

Tony La Russa's Ultimate Baseball
Strategic Simulations
675 Almanor Ave.
Suite 201
Sunnyvale, CA 94086-2901
(408) 737-6800
$49.95
$19.95 13 NL Stadiums
$19.95 13 AL Stadiums
$19.95 1991 Teams
$19.95 Great Teams 1901-1968
640K IBM PC, Tandy, or compatible
10MHz or faster recommended
supports AdLib, Roland, SoundBlaster

THE BOTTOM LINE

So what did the experts say? No easy pop fly or routine ground ball here. Because of *PCGames*' deadline, these projections were done in early April, before the season actually opened.

Our board members did their best to update their databases with recent trades and injuries, and to anticipate rookie phenomena. For example, MicroLeague performed weighted averages over the past few years to even out ballplayers' performances. Tony La Russa's team fine-tuned its player stats with last year's World Series, and then applied them to '92 with recent trades also incorporated.

SWING, BATTER

Did our trio of experts get a piece of the ball, or was it a big swing and a miss? Take a look at the accompanying sidebar, "Stats Pick Series," then decide for yourself. And if the picks aren't on target when the Fall Classic rolls around, well, even the best umpire makes a bad call now and then. ❑

YOU ARE THERE

WHISTLE-STOPS

Honey, I shrunk the Amtrak! Railroad simulations put an iron horse inside your PC.

By Peter Olafson

Design Your Own Railroad: right down to the nitty-gritty.

They haven't built the hard drive so small it couldn't hold a few up-in-the-attic items. Maybe you're thinking of old files, pictures, or board games. I'm not talking about those. I'm talking *trains*.

The computer is the perfect medium for model railroading. That gorgeous passenger terminal might look perfect on the main line of your HO-gauge set, but you have to actually pay for it; on your computer, it's just an icon or menu away. There's always room for more track on the computer, and digital trains stand invulnerable from real-world predators, like your engine-hating cat.

Surprisingly, the PC doesn't sport all that many railroad simulations. The board-game syndrome plays a part, I suppose: The fun of railroading is partly in the physical qualities of handling pieces, moving controls, listening to the motion, putting your face down at track level to watch the Super Chief's approach, throwing the switch.

MicroProse's venerable Railroad Tycoon (now in its third revision) still rules the roundhouse in terms of sheer size. But now along comes Maxis' **A-Train** (Orinda, CA, $69.95), in essence a narrow-gauge version of Tycoon. It doesn't have Tycoon's coast-to-coast sweep or coal-mine-deep detail. And yet, in certain respects, it has much more: a bit of SimCity bundled in.

A-Train focuses on the growth of a single community and its 'burbs. It's essentially a rapid-transit simulation. (The real A Train is New York City's 8th Avenue express.) From what I've seen, it's going to be a lot of fun.

For starters, A-Train looks distinctive — as much an artful midcentury train station as anything. The high-resolution art-deco veneer of its menu bars, balance sheets, and advice screens hails from the days when railroad was king. Its isometric perspective — first seen in games like Populous — provides a delightful bank-camera view of the city you're building.

Well, not right away. Who needs that golf course or that stadium — or that amusement park or that ski resort — out here in the sticks? At the outset, A-Train hands you a comfy country town, the kind of place people move to when they're getting away from the city. The only trains that stop are the ones bringing in building supplies, which stack up like Chiclets at sidings. At the end, if you've kept your wits about you, the screen may look more like Chicago's Loop, the tableau in the most advanced of six scenarios.

You do have a job to do — they didn't give you $5 million for nothing, y'know. The tasks are three: building a successful passenger and freight railroad, helping the city around it grow, and becoming a stock-market tycoon. Not an easy business. But building track is as simple as running your first model-railroad oval. Then, naturally, you'll want to pick out a station, put trains on the track, and then tell them where to go. You can also set their schedules and the lengths of their layovers — oh, yes, day turns to night, and seasons change, too — and set the switches to fall into place automatically for a particular train's passage.

A-Train's a winner — there's most definitely a light at the end of the tunnel.

Design Your Own Railroad from Abracadata (Eugene, OR, $59.95) is both a blueprint tool you use to draw up real models and an electronic model railroad for folks who just want the pleasure of directing traffic.

The screens and interface are Windows-like — the program is extremely easy to use. At the same time, there's some nice sophistication built in — more of the nitty-gritty work of railroading, right down to coupling cars and setting top speeds.

The name of the game here is *customization*. The built-in paint program lets you create anything you set your mind to: scenery, buildings, or cars. Not even a train-hating cat could quarrel with that. ❑

THUNDER BOARD. PC GAMES LIKE YOU'VE NEVER HEARD THEM BEFORE.

Lend us your ear. And we'll stuff it with a calibre of sound that's ears ahead of the competition.

Introducing Thunder Board™ from Media Vision. No other sound card out there today can soar to such incredible heights. Or plunge to such awesome lows. And Thunder Board's dynamic filtering means dynamite sound. Higher fidelity. Bigger ka-booms. And more bang for the buck.

Our guarantee is that we put the quality where your ears are. And the money where our mouth is. In fact, we'll refund your money if you don't agree Thunder Board is the best sound board for your PC games.

In addition, with Thunder Board you get three free PC action game samplers: Nova 9™, Lemmings™, and Lexi-Cross.™ Plus, free Thunder Master™ software that lets you record and edit sound files with a Wave Form Editor.

And Thunder Board is fully compatible with all the newest PC games. Plus 100% compatible with AdLib™ and Sound Blaster™ applications–to support the largest library of games possible.

What's more, Thunder Board has breakthrough features to let you break all the sound barriers. Like twice the Digitized Audio Playback and Recording Capability at an explosive 22kHz–compared to the competition's puny 11kHz.

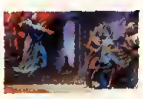
Also, you get a squadron of powerful extras. Like a Joystick Port. Headphone Jack. An 11 Voice FM Music Synthesizer that lets you score music as well as score points. And a Power Amplifier with built-in Volume Control, so you can have yourself a real blast–without blasting the neighbors. So take off–for a dealer near you. And go from static to ecstatic. Because, with Thunder Board, hearing is believing.

MEDIA VISION

Approved by

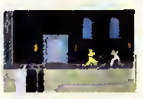
Microprose
Gunship 2000

Interplay Productions
Star Trek



Sierra On-Line®
Conquest of the Longbow®

Electronics Arts
PGA Golf Tour



Broderbund Software
Prince of Persia®

For the name of a Thunder Board dealer or simply some good sound advice, call Media Vision. 1-800-845-5870.

Media Vision, 47221 Fremont Boulevard, Fremont, CA 94538. 510-770-8600, FAX: 510-770-9592. Media Vision, Thunder Board, and Thunder Master are trademarks of Media Vision, Inc. All other trademarks are the property of their respective companies. ©1992, Media Vision, Inc.

Circle 40 on Reader Service Card.

CHILD'S PLAY

HIDDEN RESOURCES

Watch carefully and you'll see that learning grows in the most unlikely places.

By Gregg Keizer

KidWorks has a unique way of promoting storytelling skills.

Where there's smoke, there's fire. And where there's fun, there's learning.

One may be a cliché, the other as unknown as silence on the playground, but they're both true nonetheless. Dig under the surface of anything kids think of as fun, and there's some education going on.

It may be frivolous learning — that's the way adults see much of it, anyway — but it's still learning. Those 12-year-old rollerbladers imitating a pack of crazed downhill skiers learn coordination, grace, and cause and effect. First-graders out for recess may sound like a band of bad bagpipes, but they're picking up vital pieces of their education: cooperation, competition, creativity, and imagination.

The same thing happens when kids hit the keyboard and hang onto the mouse at the home computer. It doesn't even matter whether or not the software they're using carries an education/edutainment tag — they'll still learn something. And because kids won't spend time on the home PC unless it *is* fun, that means they're learning almost every minute.

That's the good news, that education isn't limited to software titles pulled from store shelves labeled *Learning*. The bad news, and it isn't even all that bad, is that it's sometimes tough for parents to notice when learning takes place. But if you're going to offer some encouragement and applause at new things discovered and mastered, you need to keep your eyes and ears open. You need to be ready for learning almost anywhere.

LEARNING THE NATURAL WAY

Some software is clearly as educational as it is fun. Those are the titles you find in the store racks labeled *Educational*. Yet even with these programs, it's not always easy to identify the learning that takes place.

A good example is **KidWorks.** This Davidson & Associates product combines an elementary word processor with a simple graphics program, then adds lots of bells and whistles, including robotic sounds and custom icon design, to grab and hold kids' attention. But exactly what kinds of things does KidWorks teach?

It teaches phonetics and punctuation for starters. Because KidWorks talks back to its writer/illustrator, pronouncing the words in a synthesized voice, it inspires both. Although KidWorks doesn't force correct spelling, kids have to come close — at least phonetically — to make the program's pronunciations understandable. The result may be strange-looking words, but the trial-and-error process of matching what's on screen with what they hear makes kids think about language, its sounds, and its sometimes odd rules of pronunciation.

KidWorks also pushes kids to use punctuation, because it "reads" commas as pauses and periods as longer delays. String together words without punctuation, and they're recited in long-winded sentences until the child wises up and starts dropping commas and periods into the text.

Children learn other things with KidWorks, too, such as sequencing (vital to storytelling) and the power of pictures (as an adjunct to writing). The program's illustrator module lets children easily create original pictures for the stories they write. (For more information on this program see the review section, Spring/Summer 1992, p. 122.)

OLD FAVORITES, GOOD TEACHERS

Other software fits this pattern, as well. Broderbund's **Where in the World Is Carmen Sandiego?** and the other titles in the Carmen series make a point to teach research skills by bundling almanacs and the like with the software.

For those of you new to the computer-game world, the Carmen titles (which

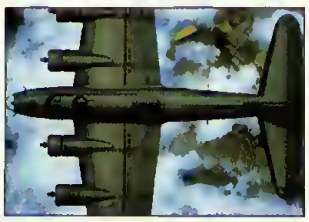
Become a legend before your own time.

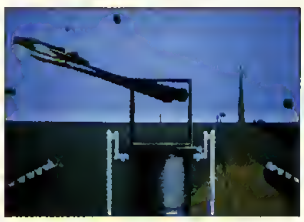
What becomes a legend most? Find out for yourself as you pilot the legendary B-17 Flying Fortress and lead a 10-man crew through the same flak-infested skies that menaced the legendary flyboys of the *Memphis Belle*.

The most complete and accurate bomber simulation ever produced, the B-17 Flying Fortress will have you negotiating 25 perilous daylight missions over Nazi-occupied Europe.

You'll allocate crew members to their specific tasks. You'll devastate strategic targets in dangerous bombing runs. You'll take control of crew positions from pilot to bombardier. And you'll even customize your own Flying Fortress with historically accurate nose art.

So pick up your copy of B-17 Flying Fortress today. And experience a flight simulation of legendary proportions.





Actual screens may vary.

MICROPROSE™
ENTERTAINMENT • SOFTWARE

For IBM PC compatibles!

For more information about exciting MicroProse products, call **1-800-879-PLAY**

© 1992 MicroProse Software, Inc. ALL RIGHTS RESERVED.

Circle 48 on Reader Service Card.

include **Where in the World, Where in Time,** and **Where In America's Past Is Carmen Sandiego?**) put kids on the trail of the grande dame of crime and her band of crooks. As crime-stopper detectives, young players must track down the thieves and retrieve the stolen loot.

To keep players from wandering aimlessly, hoping to run into the crooks, the games include reference guides. Because the reference works are an integral part of the game process, kids learn how to look up facts. (For more information on the Carmen Sandiego series, see "Take 2," p. 50 in this issue.)

EYES OPEN

It doesn't take a rocket scientist to see this learning taking place. All you have to do is watch for a few minutes, and you'll notice these learning activities (and more) happening on and off screen.

Your job, as parent, is to look, note, and encourage, especially when you see these traits — phonetic spelling and punctuation in KidWorks, for example, or historical facts and dates in the Carmen series — moving from computer to paper.

MAPMAKER, MAPMAKER, MAKE ME A MAP

It's a bit harder to spot learning in some other PC packages. Sierra's **Mixed Up Fairy Tales** may seem more like a game just for grins at first glance, but it can be a hotbed of education — not the overt kind demonstrated by KidWorks or the Carmen Sandiego series, perhaps, but learning with some subtlety.

The premise is simple: Five traditional fairy tales, such as *Jack and the Beanstalk*, *Cinderella*, and *Humpty Dumpty* have been fractured; kids travel through make-believe territory, looking for separated characters and story props.

Because Mixed Up Fairy Tales doesn't talk, but puts dialogue on screen as text, it's obvious that kids are using reading skills to decipher clues and solve problems. What's not so obvious is that they're making and using maps.

Land of the Fairy Tales isn't a big place as adventure territory goes, but it's large enough to need a map. The program graciously provides one, and even marks the player's position with a "you are here" indicator.

But to find the game's characters and props, kids really have to make maps of their own. My 6-year-old daughter played Mixed Up Fairy Tales for weeks using the built-in map, but also scratched out her own directions from the clues the game offered. The maps were crude, but they served her purpose — they identified landmarks, noted direction, and even paid some attention to spatial relationships.

(A similar version of this game is designed for systems equipped with CD-ROM drives. For more information, see Reviews, December 1991, p. 64.)

Such *ad hoc* learning —

LINKS 386 Pro

Rivaled only

This all new LINKS 386 Pro version of our popular, award-winning LINKS golf game offers many dramatic improvements that make playing LINKS 386 Pro more enjoyable – and gives you exciting new golfing possibilities!

SUPER VGA Graphics and 386 Power.

The new *LINKS 386 Pro*, featuring Harbour Town Golf Links, is the first golf game specifically designed for the graphic capabilties and computing power of your personal 386/486 computer system. SUPER VGA 256-color graphics at 640x400 resolution display breathtaking views of LINKS Championship Courses. Your friends won't believe that your computer looks so good!

Texturing of fairways, rough, sand, and other surfaces adds an extra level of realism.

Championship golf at your fingertips.

A lot of listening went into the new *LINKS 386 Pro*. Many of the new features and improvements were added in response to direct requests from LINKS users like you! An exciting new feature is our Unique Computer Opponent. Play a round of golf and save your game. The new *LINKS 386 Pro* recorded every shot you made. Send your game off to your buddy and he can play against you right on the screen, shot for shot, as if you were right there next to him! We've also included pre-recorded games from worthy opponents, statistics, a variety of game play modes and much, much more.

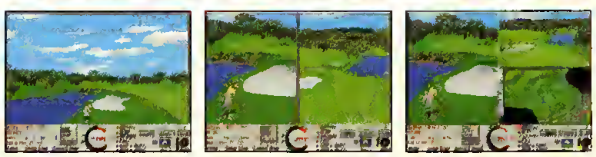
Male and female golfers.

You can use any of the 7 existing LINKS courses or upgrade your favorite course to the Super VGA version.

ACTUAL SCREEN CAPTURES

Over 345 combinations of viewing windows.

With the new *LINKS 386 Pro* you're not stuck with just one standard viewing window. With a few clicks of your mouse you can split the screen giving you a real-time reverse view of your shot to the green or add a scaleable top-view that displays the flight of your ball. Scorecard, club distance chart, terrain profile and other panels give you the flexibility to display what you want to view while playing and you can change your viewing setup at anytime!



Award-winning graphics combined with 386 computing power!

ACCESS SOFTWARE INCORPORATED

4910 W. Amelia Earhart Dr.• SLC, UT 84116
(800)800-4880 • FAX (801)359-2968

it wasn't coached by a parent or directed by the software — is learning in the purest sense. Kids decide, on their own, what they need to do to complete the game, or what they must do to simply prolong the fun.

Sideways learning like this often comes from software devoid of an education label. Graphics packages teach shapes and color blending, spreadsheets illustrate mathematics, war games lead to hitting the history books, and role-playing adventures beef up problem-solving skills.

As parents, it's our responsibility to keep a weather eye for learning whenever the computer is turned on — not so much to monitor or censor, though that's important at times, but to see when children learn, to spot what they're learning, and then to help them dig deeper into the activity or interest. It's the true joy of being a parent or an educator.

If digital education is to be more than just one more electronic babysitter, parents must use the computer as a springboard to other kinds of learning, and make sure that those things taught on screen move off the monitor and into the real world. All it takes is an eye for smoke — and fun. ❑

PRODUCT INFORMATION

KidWorks
Davidson & Associates
19840 Pioneer Ave.
Torrance, CA 90503
(800) 545-7677
$49.95
640K IBM PC, Tandy, or compatible
DOS 3.0 or later
EGA, VGA, MCGA
supports AdLib, Covox Speech Thing, IBM Speech Adapter, IBM ACPA, Sound Blaster
requires mouse
requires hard-disk drive with 2MB free space

Mixed Up Fairy Tales
Sierra On-Line
P.O. Box 485
Coarsegold, CA 93614
(209) 683-4468
$49.95
640K IBM PC, Tandy, or compatible
requires 286 or faster
EGA, VGA, Tandy 16-color
supports AdLib, ProAudio Spectrum, Roland MT-32/ LAPC-1/CM-32L, Sound Blaster, Thunderboard
requires hard-disk drive

Where in the World Is Carmen Sandiego?
Broderbund Software
500 Redwood Blvd.
P.O. Box 6121
Novato, CA 94948-6121
(800) 521-6263
$59.95
640K IBM PC, Tandy, or compatible
Hercules, CGA, EGA, VGA, MCGA, Tandy 16-color
MS-DOS 2.11 or later
supports AdLib, Sound Blaster, PS/1 Sound, Roland MT-32/ LAPC-1/CM-32L, Tandy sound
requires hard-disk drive

by the game itself.

New! Coming June 30, 1992

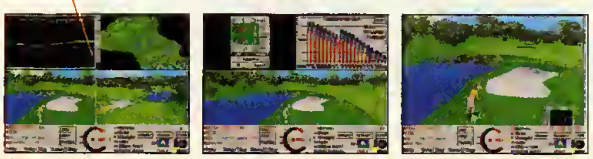
Real-time split screen views of your shot. Great for making your approach shot to the green.

Improved club selection features. Automatic club selection also available.

Wide, panoramic views giving you a better feel of the lay of the course.

Improved swing indicator for easier putting.

Up to four viewing panels on the screen at one time!



Over 345 different combinations of Multiple Viewing Windows you can setup.

Satisfaction Guaranteed

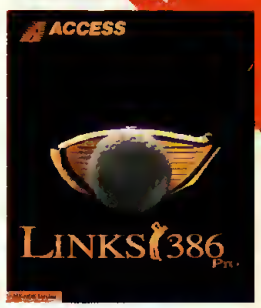
We offer free unlimited technical support by phone. And if you're not completely satisfied, you can return *LINKS 386 Pro* within 30 days for a full refund – no questions asked.

So you've got nothing to lose, but so much golfing enjoyment to gain. Try it out!

1-800-800-4880

24 hour FAX# (801)596-9128

Call toll-free 24 hours a day, 7 days a week, U.S. and Canada or visit your local software dealer.



☐ Yes! As a registered owner of LINKS I want to pre-order my *LINKS 386 Pro* featuring Harbour Town for the introductory price of $39.95 including FREE shipping in US and Canada. (If you own LINKS and haven't registered, mail or FAX us a copy of the inside front cover of your LINKS manual along with your check or credit card information.) Offer expires 08/31/92.

UT & MN residents add sales tax. International shipping extra.

Equipment required: IBM or compatible 386/486 computer with minimum 2 meg of memory, SUPER VGA graphics, one or more floppy disks, mouse and a hard disk.

Guaranteed to work with your 386/486 system with Super VGA or your money back. Not copy protected. Free unlimited technical support.

Circle 41 on Reader Service Card.

☐ Yes! Send me the new *LINKS 386 Pro* with Harbour Town for the IBM 386/486 computer for just $69.95 when it's available. If I'm not completely satisfied, I can return it for a full refund. *FREE* air shipping within the U.S.

Name_____
Address_____
City_____ State___ Zip____
Day Phone_____

☐ Check enclosed (no COD or purchase orders)
☐ Visa ☐ MasterCard ☐ American Express

Card#_____
Exp. Date_____
Signature_____

Mail to: Access Software, Inc
4910 W. Amelia Earhart Dr.
Salt Lake City, UT 84116

PERIPHERAL VISION

SOUND INVESTMENTS

This year is giving PC gamers a front-row seat at a spectacular sound performance.

By Barry Brenesal

Silence isn't golden in games. A quiet game signs its own death warrant today, when music fills ears and spoken dialogue fleshes out the plot in the best of PC entertainment. Your PC can't talk, sing, or thunder without some help, though. You need to slip an audio board into an empty expansion slot to turn on the sound.

Fortunately, you've never had it so good when it comes to PC-gaming audio. A slew of compelling trends are apparent — some that have produced results, others just getting off the ground. Let's look at a few of the leaders, and ponder why there's cause for celebration when it comes to the sounds of gaming.

The price of good computer hardware is lower than ever, and even the newest sound cards offer more value today than their counterparts did a year ago — without a corresponding increase in cost. Creative Labs' **Sound Blaster Pro** (Milpitas, CA), for instance, is worth much more than its current $299.95 suggested retail price. You can say as much or more for the newer **AdLib Gold 1000** (Quebec City, Quebec), which lists for about $299.95, too. Both cards are relatively inexpensive (street prices about 65 percent of their list values), include superior features (such as MIDI and CD-ROM interfaces), and are compatible over a wide range of sound-reproduction formats.

Sound Blaster Pro: worth the wait, worth the price.

In addition, this year's most exciting audio news is the technology behind AdLib Gold 1000. Paul Mudra, director of audio development for Westwood Associates (the group that produces the excellent Eye of the Beholder series for SSI), waxes enthusiastic: "The architecture is very close to the Yamaha, which is sold to studio musicians — not the cut-down sounds we make due with traditionally in the computer field. Using AdLib Gold, music can take on much more life, become more realistic. A game we're doing right now has caverns. With Surround Sound, we can use different types and lengths of reverb effects to make each cavern a unique place."

Other technological developments focus on the compatibility issue. Programming a musical score several times for several different cards is a lot of work. It's not surprising, then, that some of the resulting transfers sound disappointing, while others simply don't work. That's why I share the enthusiasm of Sierra's music director, Mark Seibert, for the increase in industry acceptance of the new MIDI GS standard, in which all 128 patches are mapped identically. **Roland Sound Canvas** (Los Angeles, CA, $795) uses the MIDI GS standard now, and others should follow suit. The end result is you'll see more games this year and next that play on every sound board.

No matter how good the hardware, though, you need good software to harness its potential. Game manufacturers are putting money where their sound mouths are these days, with impressive payoffs. One of the biggest and most successful is Origin Systems. Investing in audio has enhanced Origin's games in some innovative ways. Wing Commander, for instance, uses *Star Wars*-style music and sound that mirror your futuristic space-ace character's successes and failures, moment by moment, on the battlefield. Changing the mood to fit your actions pulls you into the game's subjective reality and helps get around holes in the plot.

In short, this year continues to be the best yet for PC-computerized gaming audio. You're assured a front-row seat at a spectacular sound performance, which, by the way, is a better view than the one PC users who don't play games get. Keep that in mind the next time you drive a NASCAR track, fly across Iraq, or decapitate a goblin. And don't smirk at those less fortunate than yourself, who stick with the mute PC. ❑

THE DARK QUEEN OF KRYNN

Advanced Dungeons & Dragons
COMPUTER PRODUCT

The final battle! Will Krynn ever be the same?

Champions of Krynn and *Death Knights of Krynn* challenged thousands — now, the climactic conclusion to SSI's award-winning DRAGONLANCE™ fantasy role-playing trilogy is here. ***The Dark Queen of Krynn*** propels you across the sea to Taladas for the final battle against Krynn's worst nightmare.

Be the first to explore an *underwater adventure area.* Uncover *powerful new items.* Battle creatures you've *never seen before.* Achieve character levels up to the *40th level!*

All this *plus* state-of-the-art graphics and crisp, digitized sound means you're in for an AD&D® fantasy role-playing adventure of a lifetime!

256 COLOR VGA
IBM & AMIGA!
CLUE BOOK AVAILABLE

IBM 256-COLOR VGA DISPLAYS

TO ORDER:
Visit your retailer or call 1-800-245-4525 with VISA/MC orders (USA & Canada only).

To receive SSI's complete product catalog, send $1.00 to: Strategic Simulations, Inc., 675 Almanor Avenue, Suite 201, Sunnyvale, CA 94086.

ADVANCED DUNGEONS & DRAGONS, AD&D, DRAGONLANCE and the TSR logo are trademarks owned by and used under license from TSR, Inc. ©1992 TSR, Inc.
©1992 Strategic Simulations, Inc. All rights reserved. MADE IN U.S.A.

STRATEGIC SIMULATIONS, INC.

CRISIS IN THE KREMLIN

By Peter Olafson

Only the computer can make you King — or Prime Minister, or President, or Master of the Universe. Kingmaking is a well-respected art in computer games. Back near the dawn of silicon entertainment, a program approximately called Kingdom put you on the throne. You bought and sold land, planted a portion of it with wheat, assigned a portion of the people to harvest and distribute the grain, stored and sold a portion of the crop. The object — more or less — was to keep your people happy. If you didn't strike the right balance, after a while you weren't King anymore.

The charm of a sound, simple idea is always durable, and this elemental premise has been the heart of the models used in most subsequent you-run-things games.

The most recent, and most sophisticated, incarnation is Spectrum HoloByte's forthcoming Crisis in the Kremlin. This massive governmental strategy game, built around the Soviet Union's painful struggle toward democracy, casts the player as either hard-liner Yegor Ligachev, reformist Mikhail Gorbachev, or nationalist leader Boris Yeltsin. The objective: Survive in office for 30 years by balancing the conflicting needs of the Soviet peoples — a most difficult tightrope act. Crisis in the Kremlin is easily the best game of its type.

Your action station during Crisis puts communist controls at your fingertips.

Live Long and Prosper

After you emblazon your name on your personal file, check out the headlines in *The Times* (of London), and digest a congratulatory note from your mom (she's proud of her baby), you can start setting policy in ten areas. Ranging from government style to type of ownership, each of these policy areas allows ten different stances — from despotic to ultra-liberal. You can toy with the budget categories, either in a general way by setting percentages for across-the-board increases and reductions, or in detail by particular areas of the government and economy.

And when one of numerous areas enters a crisis — you'll occasionally feel like a firefighter running from hot spot to hot spot — you're given a choice of as many as five resolution options of varying severity.

If you read the newspapers, you already have some idea what to expect in the early years (Crisis begins in 1985): the nuclear accident at Chernobyl, a rising tide of civilian protest, calls for *glasnost* and *perestroika*, the attempted secession of the Baltic states, and the ascendance of Yeltsin.

All this is splendidly orchestrated by advisory telex communiqués from ministries, KGB reports on CIA interceptions, television news broadcasts complete with slick video shot by CNN, digitized photos, dispatches of poll results, and animations of such things as your hand reaching for a crisis phone. You can collect highlights for later viewing via a VCR-style interface; just bear in mind that it's a Soviet VCR.

Naturally, you have access to a good amount of detail at most any time from the main game screen — a scrolling world map bracketed with a dashboard of clickable status bars and buttons.

The object? Keep the people happy. And if you don't, well, eventually an ominous message on England's BBC reports your untimely death and the ascension to power of the head of the

KGB, a euphemism for a palace coup. It's tough. As Premier Peterooski, I never lasted past late 1988.

On one level, Crisis is a rock-solid game that stresses interrelationships and rewards a holistic approach. A quick-fix resolution of one crisis may well be the catalyst for another. Slow and steady wins the race.

Crisis in the Kremlin would make an ideal teaching tool in a high-school history or political-science class. And presentation is so elegant — there's something almost regal in its bearing — that it's bound to tie up far too much of your time at home. Kingdom? Kingdom who?

Moreover, Crisis doesn't succumb to the main vulnerability of games like this: It doesn't feel like a camouflaged mathematical formula. There's always a risk in a game like this that the Russian bear will appear to have no fur — that is, the polynomial skeleton beneath will wear through the game's fabric.

But Crisis so clothes its internal operations in luscious graphics and animations that you don't even think about the gears meshing in its back room. That's a tribute both to the sophistication of the model and to Spectrum's theatrical skill in concealing it.

As is customary with previews, I saw Crisis in an under-construction version. It wasn't quite done, and that work-in-progress status renders it somewhat immune to the sort of detailed criticism you'd normally see. Still, there's one misgiving that must be mentioned: Crisis in the Kremlin seems too lighthearted.

In some places, this is delightful — as when selecting the *Uncontrolled* level for media freedom while setting policy, a national tabloid pops up with the headline "Elvis Tribe Found in Siberia."

But the humor goes too far occasionally, notably in the options offered to relieve a crisis. During a food crisis, for instance, there's an option to distribute free copies of "1,001 Delightful Cabbage Recipes," and during a consumer-goods crisis you can elect to "Encourage people to study Zen Buddhism so they can get along without material possessions."

We need games that are bright and lively, and that make us smile as they make us think, but the plight of the former Soviet Union and its spin-off republics isn't really a laughing matter. Wouldn't it have been more instructive, and more in the spirit of the game, to introduce real options?

Nevertheless, against the giant tableau of Crisis in the Kremlin, that's a fairly minor lament. *Ochen khorosho*, Spectrum — very good.

Spectrum HoloByte, 2061 Challenger Drive, Alameda, CA 94501, (510) 522-1164; IBM PC, Tandy, or compatible, 640K RAM; EGA, VGA; supports AdLib, Roland, Sound Blaster; requires hard-disk drive; mouse recommended; $69.95

JUST GRANDMA AND ME

By Lafe Low

Imagine an Alice who spins the tale of *Wonderland* herself — or a New England whaler who whispers, "Call me Ishmael," as he recounts his time aboard the *Pequod*.

Talking books may be already on tape, with versions ported over to television for years, but they're new to the home computer. Thanks to the technology of multimedia, though, they're here now. And they're great.

"Hi there," says a little critter as he greets you at the beginning of Just Grandma and Me. This captivating and comforting children's interactive — and talking — storybook gives you a warm-and-fuzzy feeling the whole way through.

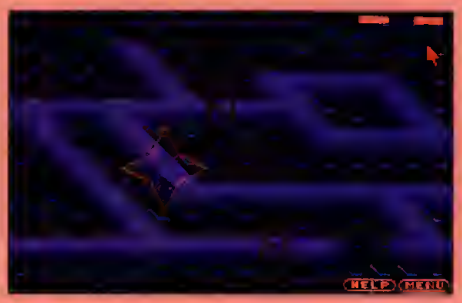
Based on popular kids'-lit author Mercer Mayer's *Just Grandma and Me*, this multimedia production is the first of Broderbund's *Living Books* series. Better than a book, better than a painting, better than a movie, this talking tale of a delightful day at the beach with Grandma will hold a child's fascination like few things you've seen on the PC.

Whimsical Adventure

As you'd expect from something aimed at kids aged 3 to 8, Just Grandma and Me's opening menu screen (or, more appropriately, its title page) is simple. The little critter directs you, both with speech and hand gestures, to have the story read to you or to play it yourself, select the language you'd like (English, Spanish, or

Just Grandma and Me's screens are minefields of animation.

AS WILD AS YOUR IMAGINATION. AS UNIQUE AS YOUR PERSONALITY.



YOUR GAME.

CREATE IT WITH GAME•MAKER.™

Mouse driven, 256 color VGA graphics based, Computer Aided Game Design system. Create an unlimited number of animated monsters, characters, scenes, and assemble them into games of your own.

GAME•MAKER is especially adept at making arcade and adventure games. Years of fun for only $89 (plus $4.00 express shipping).

ORDER GAME•MAKER TOLL FREE:
1-800-533-6772
(CREDIT CARD ORDERS ONLY)

Call 603-332-8164 for more information or write: KD SOFTWARE, Great Falls Avenue P.O. Box 448, Rochester, NH 03867.

Requires IBM compatible 286, 386, or 486 with color VGA monitor & mouse. Joystick optional. Game•Maker designed & produced by Recreational Software Designs.

Circle 99 on Reader Service Card.

Japanese), head to other options, or quit. The little critter — that's really what he calls himself — boogies to the music while you decide what to do.

The music in Just Grandma and Me, from the introductory score to the background tunes throughout the story, is redolent of the Vince Guaraldi Trio, the renowned jazz group probably best recognized as responsible for the music in the *Peanuts* television specials. It's perfectly appropriate — at once whimsical, melodic, and engaging.

The natural, cherubic voice of the little critter — remember, MPC software such as Just Grandma and Me can actually talk to you — is sure to put any child at ease, even if he or she is playing with a computer for the very first time. You may never discover the little critter's name, but it's no matter. After the first couple of pages, you feel as though you know him anyway.

Because you can listen to Just Grandma and Me in English, Japanese, or Spanish, it's perfect for tots' language learning. Japanese- or Spanish-speaking kids can pick up a bit of English, while English speakers may absorb one of the other languages simply by listening. No one's been left out of Just Grandma and Me, though, for even hearing-impaired kids will be captivated by the animations spread throughout the book.

The *Read to Me* option takes kids all the way through the story, and gives them — if they want it — complete control. Children can go through the story page by page, back up to look at previously explored pages, or stay on one page and see what surprises it holds.

Once a child begins the trip to the beach with Grandma, the screen comes alive. Click on just about anything and you get a presentation. On the first page, as you're looking at Grandma and the little critter waiting for the bus to the beach, you can click on the tree, the bird's nest, the cow, the mailbox, Grandma's bag, the house, Grandma herself, and who knows what else. Click on nearly anything that isn't a background graphic and it springs to life. In front of Grandma's house, clicking on the tree sends a squirrel into a frenzied search. At the beach, clicking on a starfish sends it into a funky dance.

The educational value of multimedia applications such as Just Grandma and Me is obvious to adults, but well hidden to kids. Between the rich sound and music, animated storybook paintings, and explore-as-you-go concepts, a child could spend a minute or an hour and have an enriching and rewarding experience either way.

Hands Off, Parents

Just Grandma and Me doesn't need any adult supervision; a child can get going with the program with only minimal help. Even children with short attention spans will be hooked.

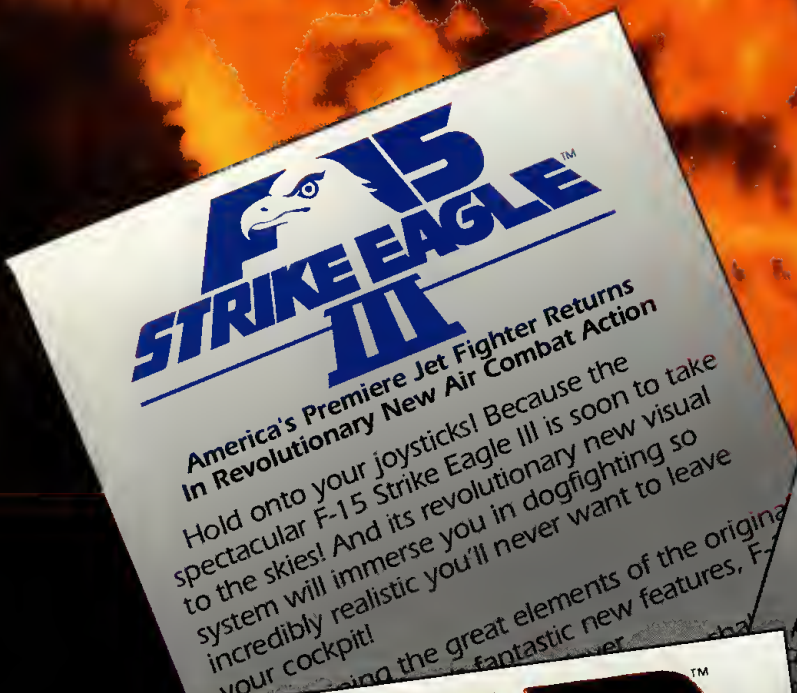
Broderbund's series of *Living Books* will ultimately include Marc Brown's *Arthur's Teacher Trouble* and "The Tortoise and the Hare" from *Aesop's Fables*. The company also will convert a number of classic children's tales and poetry to *Living Books* format for the multimedia-equipped PC.

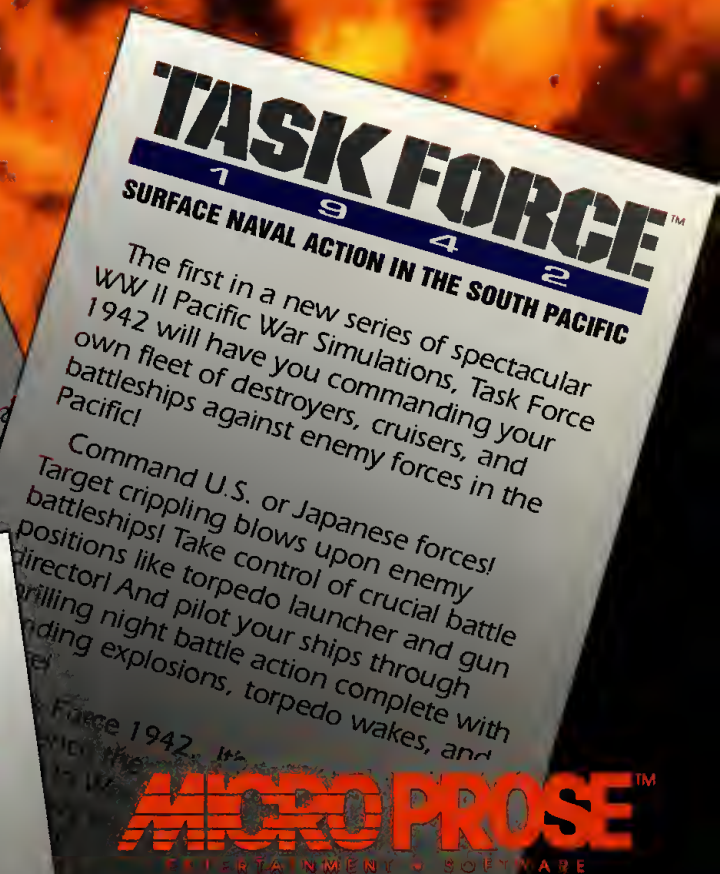
Just Grandma and Me is a wonderful example of what MPC can do. Sure, all that wild hardware and software you'll need just to get the program off the ground can be expensive, but it's difficult to put a price on the way a child's eyes light up when he or she turns the first page. This charming story rightfully takes center stage as multimedia débuts on the PC. ❑

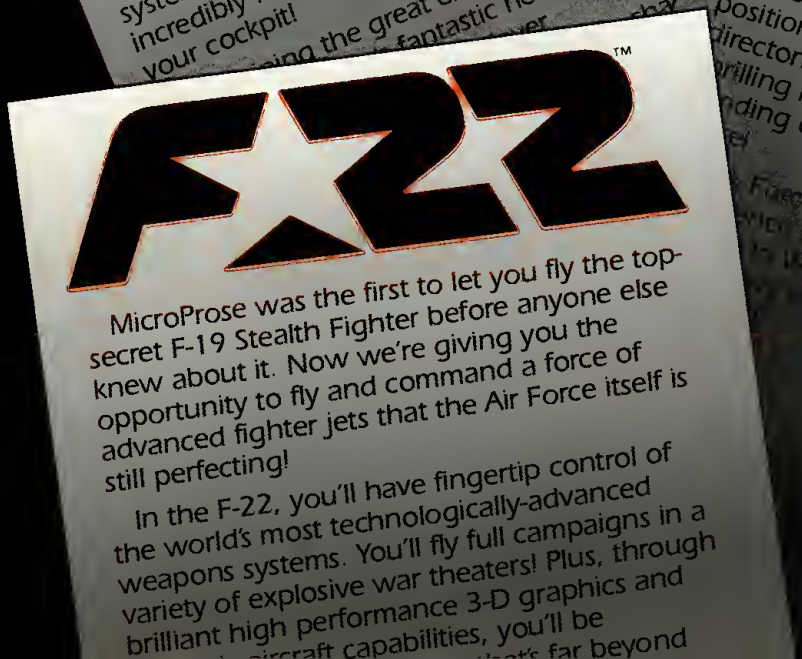
Broderbund Software, 500 Redwood Blvd., Novato, CA 94948-6121, (415) 382-4400; MPC-compatible IBM PC, Tandy, or compatible; 386SX or faster; 2MB RAM VGA, 4MB RAM SVGA, DOS 3.1 or later; Microsoft Windows 3.0 with Multimedia Extensions 1.0 or later; VGA, SVGA; 30MB or larger hard-disk drive, CD-ROM drive with sustained 150K/sec transfer rate and one-second or less average seek time; MPC-compatible sound board (AdLib Gold, Pro AudioSpectrum, Sound Blaster Pro); mouse; $49.95

TRIPLE THREAT

Get ready for 3 thrilling military simulations from MicroProse!







MICROPROSE™
ENTERTAINMENT • SOFTWARE

Coming soon for IBM PC Compatibles!

For more information about exciting MicroProse products, call 1-800-879-PLAY

© 1992 MicroProse Software, Inc. ALL RIGHTS RESERVED.

Circle 16 on Reader Service Card.

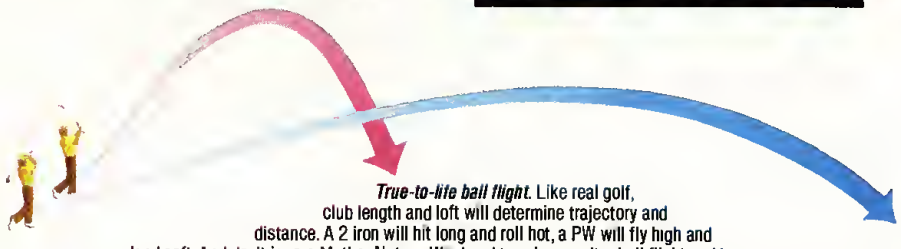
Finally. A C
With No

Classic swing characteristics. The ideal swing for every club in the bag. Woods are hit with a full turn and the short irons with a smooth, three quarter backswing. From drives to chips to putts, every shot is textbook Nicklaus.

Created by Jack Nicklaus. Voted Golfer of the Century. The preeminent course architect of our time. *Signature Edition*™ is Nicklaus' third golf game and his crowning achievement on the computer. "It's the newest, most comprehensive game on the market."

The only 256 Color VGA Course Designer on the market. Another first from Nicklaus. The powerful 256 Color VGA Course Designer is the "magic wand of golf." Create an unlimited number of golf courses in breathtaking color.

Refine each hole with "Plot & Play." Are the bunkers in unfair positions? Don't wait until your course design is completed to find out — play the hole instantly, while design is in progress, and feel out its playability.



True-to-life ball flight. Like real golf, club length and loft will determine trajectory and distance. A 2 iron will hit long and roll hot, a PW will fly high and land soft. And don't ignore Mother Nature. Wind and terrain can alter ball flight and bounce.

Produced in association with Jack Nicklaus Productions, Inc. Actual game screens from IBM PC VGA version of the game. Other versions may vary. Jack Nicklaus Golf and Course Design Signature Edition and the Golden Bear symbol are trademarks of Golden Bear, International. Pebble Beach is a registered trademark of the Pebble Beach Company. © 1992 Accolade, Inc. All rights reserved.

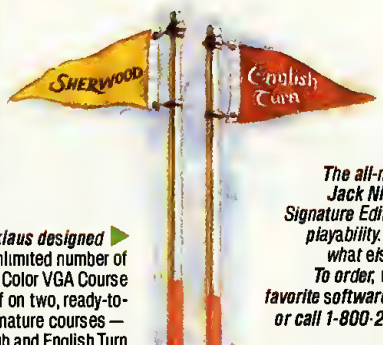
Golf Game Handicap.

Compatible with Jack Nicklaus Unlimited Golf.™ Existing courses created with *Unlimited*™ can be imported to the *Signature Edition*.™

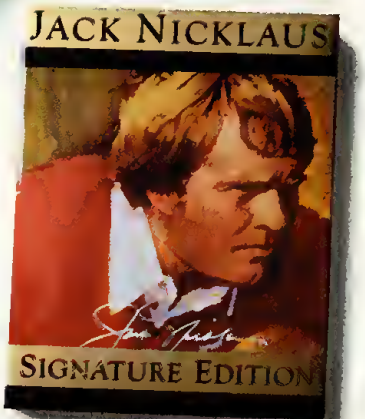
Hear golf's greatest hits. Digitized sound effects add to the total wealth of realism. The unmistakable sound of a forged blade cutting the air. The perfect "click" of a club catching the sweet spot. It just doesn't get any better than this.

Jack Nicklaus' 256 color masterpiece. Feature rich, with five digitized golfer animations (including the Golden Bear himself); authentic tour statistics and up to five rounds of tournament play. Tee off with friends — or computerized opponents, whose abilities can be altered with the Player Editor.

The fastest screen redraws. Slow play is the bane of golf. *Signature Edition*™ solves that problem with fastest screen drawing speeds of any comparable golf game.



Includes two Nicklaus designed courses. Create an unlimited number of layouts with the 256 Color VGA Course Designer or tee off on two, ready-to-play Nicklaus signature courses — Sherwood Country Club and English Turn.



The all-new Jack Nicklaus Signature Edition.™ *Unprecedented realism combined with unmatched playability. Or in the language of the links, "dead solid perfect" But what else would you expect from Jack Nicklaus and Accolade?*

To order, visit your favorite software retailer or call 1-800-245-7744.

ACCOLADE™

The best in entertainment software.™

Coming this fall for the Apple® Macintosh.®

Circle 29 on Reader Service Card.

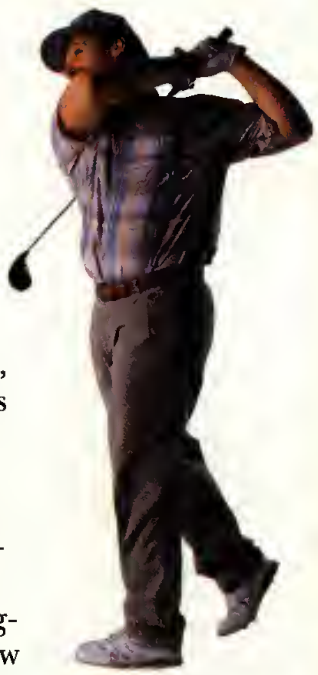
18

TEE TIME

What's new on the computer-golf scene? Recent releases and updated titles offer state-of-the-art graphics, tighter-than-ever control, sophisticated strategy, and that irresistible arcade challenge.

By Peter Scisco

A summer thunderstorm hammers rain on your windshield. It's your first free weekend in months — and all you can think about is the bag of clubs in your trunk, the $30 greens fee you paid for an early tee time, and the miserable, driving downpour. Wait a minute — was that lightning?



Get smart — go home to your PC. Computer golf games combine strategy and arcade so cleanly that it's difficult to imagine another sport better suited to the computer. Even an apprentice computer user — or golfer, for that matter — can quickly learn enough about the game and the PC to play competitively. The commands, the rules, the scoring, and the challenges are the epitome of simplicity.

New releases — both from senior players in golf software and from tour rookies — open the game to even more sophisticated and realistic vistas.

Accolade and Access Software, two long-time golf-game publishers, have new editions in the pro shop. Electronic Arts, a

Access Software has retained its lead in computer-golf graphics with its creation of LINKS 386 Pro.

To handle LINKS 386 Pro's stunning visuals, your system has to pack a lot of muscle.

more recent entry, has a new version ready, too. And no less a giant, Microsoft, with the help of Access, is getting into the act with Microsoft Golf, a version of LINKS specially designed for Windows. There's even a multimedia version slated to follow.

If you haven't hit a computerized golf ball lately, you'll be amazed at the changes in this silicon sport. From state-of-the-art graphics to improved control, from tournament play to sophisticated interfaces, the latest round of computer golf tees off for the big feather.

POWERFUL GOOD LOOKS

Access Software hit one of the biggest drives of the computer golf-game match when it released LINKS in 1990. No other golf game brought so much reality to the PC screen. LINKS was serious stuff — not just a game, but a simulation.

The newest LINKS — **LINKS 386 Pro** — retains Access' lead in computer-golf graphics. As you stand on the LINKS 386 Pro tee, the course spreads out before you in photographic detail, with terrain so lifelike and clear that you feel as though you're playing the real thing — or at least watching the real thing on interactive TV.

But this detail exacts a hefty hardware price. You simply can't play this game (or Microsoft Golf) on a PC equipped with the lowly 286. Not only do you need a 386-based computer, but you also need a Super VGA card equipped with 1 megabyte of video memory and a compatible monitor. Additional demands include at least 2 megabytes of memory (though you really need 4).

LINKS 386 Pro even uses a DOS extender to create a contiguous memory area large enough to handle the stunning visuals. And to guarantee against system crashes, you'll need to eliminate all memory-resident programs, disk caches, and RAM disks from your machine before playing. This program isn't for everyone: Only the best-equipped gamers can play LINKS.

Microsoft Golf requires the same amount of muscle, plus it needs Windows. And if the company designs an MPC (multimedia personal computer) version, it'll demand an MPC-compatible CD-ROM drive, and Windows 3.1 or 3.0 with Multimedia Extensions.

You don't need quite as much power to play **PGA Tour for Windows**, but, as with all Windows applications, the more you can afford the better the programs run. A 386 or faster computer and a couple megabytes of RAM should do. You can get by with less in PGA Tour for Windows because it forgoes realistic display for a colorfully animated playing screen in 16 or 256 colors. The up side is that PGA Tour for Windows redraws the scene faster than any of the games reviewed here.

Jack Nicklaus Golf & Course Design: Signature Edition uses 256 colors and shading to create the slopes and contours of actual golf courses. With fully digitized players and animation, it's a much improved look over other Jack Nicklaus games. Best of all, it insists on the least amount of horsepower. Nicklaus players need only a 286 computer with VGA graphics and 640K of RAM — no Windows, no DOS extenders, no Super VGA.

Jack Nicklaus does a good job of showing the terrain of a golf course and the trees that form hazards and obstacles along the fairways. But water and bunkers are noticeably flat — the game just can't convey depth and dimension the way LINKS 386 Pro does. And you pay the price for this lack of power in other ways, too, for Nicklaus redraws the screen agonizingly slowly compared with PGA Tour.

Nicklaus and LINKS 386 Pro offer digitized players, but the 386 Pro players show more detail. The animation is excellent in both. PGA Tour for Windows uses drawn characters that, though expertly animated, lack realism. All three games offer the choice of male or female players in different styles and dress.

PLAY'S THE THING

No golf game is worth a divot if it doesn't play well. Fortunately, all these games show dramatic improvement

over their earlier incarnations. Some new features come from customer demands, while others arrive courtesy of the graphics interfaces made possible by Windows.

Jack Nicklaus is a good example of how a game can get better without losing the qualities that made it a winner in the first place. Accolade recommends a mouse for play, but you can execute all of the game's commands easily from the keyboard. (The exception is the course-design module; selecting different options and operations is much easier there with mouse in hand.)

This mouse recommendation shows how far Accolade has gone in creating a push-button interface for Nicklaus. You'll welcome such small improvements as the club-selection screen, which lets you pick a club from a menu, for instance. Earlier versions limited you to checking a club's distance rating from a similar menu; you couldn't select a club from there. Clubs tend to play a little shorter than the ratings suggest in Nicklaus, so when in doubt, take a bigger club.

Another change in the new Nicklaus is the power bar you use to decide how hard to hit the ball. In previous editions, the bar stood vertically at the left-hand side of the screen. Jack Nicklaus Signature Edition brings the bar to the bottom of the screen, which allows for a wider, more panoramic playing screen.

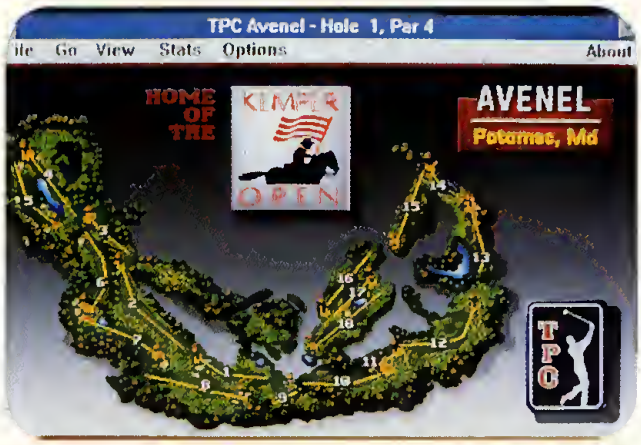
Like most golf games, Jack Nicklaus uses a three-press system for making shots: Press a button to start your swing, press the button again when the power bar hits the correct level, then press the button a third time when the power bar descends to the snap line. Beginning players will have trouble mastering the stroke, as the power indicator moves fast — even on a 16-megahertz machine. An accurate shot is almost a matter of luck, which eliminates a lot of the strategic element of the game.

PGA Tour for Windows also uses the three-press approach, but the power bar is much easier to judge. Even on a 486 computer (a lot more computer than most people have at home), it's possible to make precise shots. The power bar itself is much smaller than the one in Nicklaus, but the graphics resolution makes it easy to read and use. Clubs in PGA Tour for Windows generally play a little longer than their ratings; play one fewer club on an approach with trouble behind the green. The exception is when you face a water hazard that fronts the green. In that case, it's better to go long than to fall short and lose a stroke to the water.

LINKS 386 Pro and Microsoft Golf use an entirely different pattern for golf swings. Instead of a horizontal power bar, this pair uses a circular power meter. The snap point is at the bottom of the circle; the full-power mark is at the top. Press a button to start the swing, hold the button or key as you watch the power indicator go around, release the button when the indicator reaches the desired level, watch it move back toward the starting position, then finally press the button or key one last time when the indicator hits zero.

Different enough from other golf games to stymie first-time players, this procedure takes some getting used to. The power delineations aren't marked as clearly as those in Nicklaus, which divides its power bar into ten sections (think of them as percentages of the full swing), or PGA Tour Golf for Windows, which segments its bar into four parts, each a quarter of a full swing.

The only way to become an accurate golfer with LINKS 386 Pro or Microsoft Golf is by hitting buckets of balls on the driving range and chipping green. Club distances are consistent with their posted ratings, but the clubs play shorter than you might expect from the fairway. You're usually better off taking a longer club on an approach shot.



PGA Tour Windows puts critical information at your fingertips.

THE GREEN MACHINE

MicroProse made its name in heavy-duty combat simulations for the discriminating power monger. But now the company is working with one of its overseas partners to create a golf game it can call its own. It tests the imagination to wonder what the result will be. Arnold Palmer meets SDI? Lee Travino Stealth Golf? This fall, silicon duffers will find out when the company releases GREENS.

According to information available at press time, the PC version of GREENS will feature six courses, 3D graphics images, an automatic handicap system, right- and left-handed swings, tournament play, and several other options. A version for the Commodore Amiga computer is already available.

Perhaps GREENS' most intriguing feature is a special view from behind the ball — you're taken on a flight through space from tee to fairway to green. First impressions easily make that the most dramatic graphics element of the game. Overall, though, the design has a long way to go before it can compete with the four titles covered here. — P.S.

You can still play against the Golden Bear in Jack Nicklaus Signature Edition.

Design your own courses by modifying Nicklaus' own creations in the Signature Edition.

Selecting clubs and accessing other game options are simplified in both PGA Tour Golf for Windows and Microsoft Golf through the built-in Windows dialog boxes and drop-down menus. LINKS 386 Pro adopts an improved interface in the style of Jack Nicklaus, but the higher display resolution makes room for more player options on screen for immediate access. Club selection, for example, is almost automatic — simply pass the cursor over the *Club Indicator* button and the available clubs pop up in a menu, ready for your pick.

AIM WELL

Each game employs its own peculiar technique for aiming shots, though the aiming methods remain consistent within each, no matter from where you're hitting. To aim a shot in Jack Nicklaus, for instance, you move an aiming ball at the top of the screen to the right or left; a straight hit travels toward the ball. PGA Tour Golf for Windows works much the same, except that it uses a cross hair in the center of the screen as a target.

LINKS 386 Pro and Microsoft Golf use a barber-shop pole you can place almost anywhere on the fairway or green. This marker has one additional advantage as well: It indicates the distance between the pole and the point where the player addresses the ball — invaluable information when you're selecting a club to lay a shot in front of the green, or for calculating whether you can fly a fairway bunker from the tee.

All these games use topographic grids to help you read the breaks on the green, though each uses the grid in different ways. Putting in Jack Nicklaus and PGA Tour Golf for Windows is difficult; in LINKS 386 Pro and Microsoft Golf, putting still isn't easy, but play is more consistent.

Aligning a putt in Jack Nicklaus means drawing an imaginary line between your ball on the green, the hole, and the aiming ball at the top of the screen. But the grid fails to give an accurate picture of breaks and undulations.

The game's break indicator measures the severity and direction of a green's slope on an arbitrary scale from 00 to 35, with 35 being the steepest. On this scale, you'd think that a 04 grade would be insignificant, but even a number that small can affect your putt considerably. (A little math reveals that 04 is actually a steep 11-percent grade — but who wants to use a calculator when playing golf?) It would have made more sense to base the scale on degrees from 00 to 90 (90 degrees is a right angle), so that you could instinctively judge the severity of the break.

In PGA Tour Golf for Windows, the distances among your ball, the hole, and the target point are shorter than in Nicklaus, and so easier to align. What complicates matters is that the game moves you to a separate grid screen before each putt, although that screen provides better information about the green than what's available in Nicklaus. Besides the accurate topographic lines, you also get a measurement of how far your ball is above or below the cup. That's useful when you're figuring how hard or soft to putt.

LINKS 386 Pro and Microsoft Golf offer the easiest aiming mechanism for putting: Just place the barber pole directly on the green. Like PGA, these two games provide ample information for judging the severity of breaks and slopes, including an accurate grid and a measurement of relative position (above or below the cup). With LINKS 386 Pro, you can even call up a profile view, which provides this information from anywhere on the course (great for determining how to play an uphill approach).

THE RIGHT TOUCH

This quartet of games exploit the experience of generations of computer-golf titles to offer several specialty areas. Computer golfers often buy more than one game, and they'll have plenty of special features from which to choose among these four.

Jack Nicklaus Signature Edition, of course, includes a sophisticated course architect and designer. If you want to build your own course, perhaps modeling one after a local course you play, Nicklaus has no equal. Accolade

has expanded the number of graphics objects, from hazards to backgrounds, available to course-designer wannabes. Whether you start from scratch or modify the two courses that come with the game, designing 18 holes presents a different and interesting challenge when you don't really feel like chasing the ball through the heather.

You'll also enjoy Nicklaus' customizing features that let you pick the look of your computer persona, and that let you create computer opponents modeled after real golfers. To create a golfer, use the *Computer Player Shots* screen to set different skill and accuracy percentages for different shots, according to statistics of the golfer you want to imitate.

LINKS 386 Pro has a similar feature — its "unique human opponent." This option lets you save a single player performance in its entirety, essentially creating a computerized opponent from your personal best efforts. You can even send the profile to a friend, and he or she can play against your silicon clone.

PGA Tour for Windows, LINKS 386 Pro, and Microsoft Golf offer special shot selections not available in Nicklaus. Chip shots appear as a menu selection in all three, while Nicklaus omits it (but includes a somewhat similar punch shot). LINKS 386 Pro and Microsoft Golf have sophisticated setup screens you can use to define shots in as many as six different ways, and then save for later use.

The graphics images in PGA Tour for Windows are created for speed — not realism.

With the exception of Microsoft Golf, all games profiled here include a tournament mode. In Nicklaus, your tournament can sport as many as 72 players; you can set it to cover from one to five rounds. The tournaments aren't as formal as those in PGA Tour Golf for Windows, which re-creates the feel of a real PGA tournament, complete with opponents culled from the ranks of PGA professionals and cuts from round to round. LINKS 386 Pro brings tournament play to a new level with a connection to the Computer Sports Network, where you can compete with other computer golfers from across the country in interactive play.

19TH HOLE

Computer golf owes its popularity to the same things that make real golf one of the world's fastest-growing sports. Both require mental toughness over physical strength. Both can be played by almost anyone. And both play in a natural setting, away from stadiums and painted lines. While computer golf will never replace the real game, it's a canny imitation, one better suited to the PC than any other sport. And it sure beats dodging lightning on the fairway. ❑

PRODUCT INFORMATION

Jack Nicklaus Golf & Course Design: Signature Edition
Accolade
550 South Winchester Blvd.
San Jose, CA 95128
(408) 985-1700
$69.95
640K IBM PC, Tandy, or compatible
16MHz 286 or faster recommended
VGA
supports AdLib, SoundBlaster, Roland, Thunder Board
requires hard-disk drive

LINKS 386 Pro
Access Software
4910 West Amelia Earhart Drive
Salt Lake City, UT 84116
(800) 800-4880
$69.95
2MB IBM PC, Tandy, or compatible
requires 16MHz 386SX or faster
SVGA
requires mouse

Microsoft Golf
Microsoft Corp.
1 Microsoft Way
Redmond, WA 98052-6399
(206) 936-7022
$64.95
2MB IBM PC, Tandy, or compatible
20MHz 386SX or faster recommended
requires Windows 3.0 or later
SVGA
requires mouse

PGA Tour for Windows
Electronic Arts
1450 Fashion Island Blvd.
San Mateo, CA 94404
(415) 571-7171
$59.95
2MB IBM PC, Tandy, or compatible
requires 12MHz 286 or faster
requires Windows 3.0 or later
VGA
supports AdLib, Sound Blaster, Roland, Thunder Board
requires hard-disk drive

Illustration: Cameron Eagle

SCHOOL'S OUT. IT'S VACATION TIME and the weather's right for swimming and baseball, hiking and skating, tanning and surfing, flying kites and everything else we do when the sun's hot and the light stays long. Sure, picnic-drenching summer showers may send you temporarily inside, and if you're really pushing yourself, you'll be laid up with more than one pulled muscle. When you can't get out, you're a candidate for the summertime blues. They say there ain't no cure, but they're wrong. Computer games give you just the relief you need. When it rains on your parade, or hay fever's got you shut in, or you want some relief from the heat, flip the switch and turn on the PC.

The four games discussed here are perfect samples of summertime quick breaks: They'll entertain immediately, they don't demand much study, and they'll get you back outdoors faster than you can say "sunblock."

Two are new-and-improved versions of old favorites; you'll recognize the remaining pair from their arcade ancestry. Each game in this quartet is easy to play and difficult to master — and not one of the manuals reads like *War and Peace*. Since play is swift and mostly furious, you won't have to stay up all night beating your opponent into submission, either. Win, lose, or draw, you can get in and get out fast — so you can get on with real summer stuff.

They say there ain't no cure for the summertime blues, but they're wrong — just turn on your PC.

By Ed Ferrell

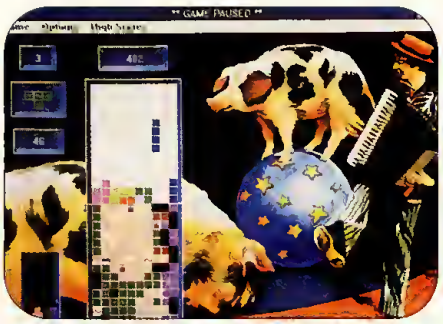
FROM RUSSIA, WITH LOVE

Your first sun-drenched software package comes from Russia, courtesy of Spectrum HoloByte: **Super Tetris for Windows**. This falling jigsaw puzzle may test your spatial-

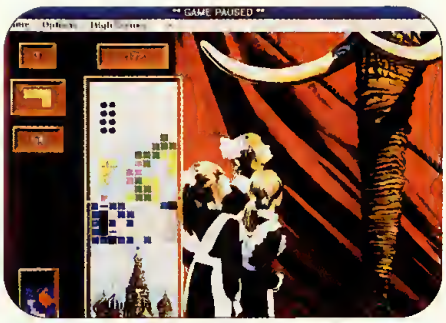
COOL GAMES FOR THE DOG DAYS

reasoning abilities, but that's not the point. It's almost more fun than a gamer can stand.

Spectrum imported this offering, as it did the original, from deep inside the former Soviet Union. The success of the original Tetris demanded this obligatory sequel, and designer Alexey Pajitnov rose to the challenge. Super Tetris for Windows preserves the game's addictive nature, but includes a save feature so you can get some sleep. If you've never played Tetris, you're in for a treat. If you're an old hand, you've got some surprises in store. It's as maddening as the original, it plays just as simply, but it's a lot harder to win.



The Moscow Circus provides a colorful background for Super Tetris.



Bomb away your mistakes or blast special treasure blocks in Super Tetris for Windows.

At the bottom of a pit is a pile of colored blocks (rubble), intermixed with open spaces. The rubble covers one of several vibrant graphics images of the Moscow Circus. As one of several differently shaped pieces falls down into the pit, you aim it at the rubble, shifting the solid blocks, sticks, and T shapes right or left, or rotating them for a fit into the empty spaces. When you manipulate the falling piece into a gap and create an unbroken line, the line disappears. The rubble moves up to fill the space, revealing another line of the picture. Sounds easy, doesn't it? There's a catch.

Because you can't always form a complete line, you'll often have to stack the shapes. The trick is to avoid stacking pieces too high, for they'll crowd the pit and shorten the distance (and time) you have to work with each shape. If things aren't going well, you just have to work faster.

So far, it's just Tetris on steroids. Super Tetris offers more, though, because you get bonus bombs when you eliminate a line of rubble or shapes. The more lines you vaporize at once, the more bombs you're awarded. You can use these bombs to blast holes in the rubble, destroy poorly stacked blocks, or blow gaps to fit the next falling piece.

To sweeten the deal, Pajitnov hid treasure in the rubble, as well. Hit these treasure blocks with bombs, and you're awarded extra pieces or you get to see entire lines explode. Treasures that disappear as part of a completed line do nothing for your score or progress, though.

Once you've managed to knock away all the rubble, revealing the hidden picture, you start over, this time with a deeper pit, fewer pieces, and a brand-new picture. Tetris addiction is dangerous, something Spectrum has finally recognized. Super Tetris for Windows includes a timed-game option, so that you can police your playing time.

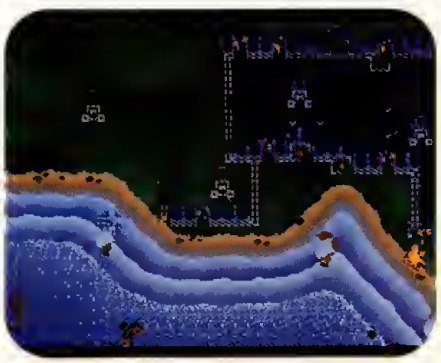
In Super Tetris for Windows' two-player mode, you either play against an opponent on the same screen or work cooperatively toward the same objective. Ten progressively tougher levels increase the falling speed of the blocks; the more-difficult levels hold more treasure blocks and graphics to shoot for. Rousing Russian music is available for those with sound cards, providing a nice background for the game's circus theme.

Because this version of Super Tetris runs under the Windows graphical user environment, you can play at a moment's notice: When you want to take a break from your Windows work, simply minimize your application, double-click on the Super Tetris icon, and play a round or two. Worked out your office stress? Then close the Super Tetris window and head back to your word processor or spreadsheet. You can even pause Super Tetris for Windows, open up another window for a dab of real work, then head back to the game — all without saving.

O'ER THE RAMPARTS WE HAIL

When you tire of playing with blocks and want something more like summertime entertainment — making castles in the sand — head for Electronic Arts' **Rampart**. Part puzzle, part pommel, this PC version of a popular arcade game is cleaner than a dirt-clod fight and almost as dangerous. Losing nothing in the translation, this is siege warfare, pure and simple. It beats watching waves wash away your sand castle any day.

In classic siege fashion, you pound the enemy into oblivion before he does the same to you. In "game-speak," though, you're trying to score a series of strategic military victories and conquer an entire continent. Quickness and accuracy are vital. If you waste time pondering strategy, you'll only let the barbarians scale your castle walls. Fortunately, Rampart offers only three phases: destroy the enemy, rebuild castle walls, and do it all over again.



Play competitively against your friends, and leave the computer out of it in Rampart.

To begin, select a home castle, then watch the computer build a solid stone wall around it. You receive a number of medieval-looking cannons,

and must place them within your castle walls. Put them where you want, but heed the unfriendly ships waiting offshore. They're there for a reason.

Although you may have multiple guns, you aim them collectively by placing a keyboard-, joystick-, or mouse-controlled cross hair atop the target. The offshore ships, meanwhile, aim back. They're also on the move, so you'll need to lead them with the aiming cross hair before you punch the fire button or key. A good shot sends the warships to Davy Jones' locker, but you may have to indulge in some overkill, because even damaged ships return fire. Keep at it until you run out of cannonballs or time.

Forget any idea of rest after the battle. Like a good arcade machine that keeps yanking quarters from your pocket, Rampart won't give you pause to reflect or even catch your breath. Those ships' cannons reduced parts of your castle wall to rubble, and you have only 30 seconds to repair the damage. To make things even more hectic, Rampart sends reinforcements to join the ships you didn't sink. It looks like round 2 is going to be even tougher.

Replacement wall pieces — there are several shapes, some straight, some twisted — appear in the center of your castle, and you drag and rotate them into place to rebuild the wall. Arrange these corner, straight, and T-shape pieces quickly to surround your castle completely. Defense is the first order of the day, and you won't win if you can't protect yourself.

After you've encircled the home castle, see whether you're quick enough to surround the other keeps in your kingdom, as well. You score points for grabbing additional territory, and all walled castles can contain gun emplacements, increasing your firepower.

Whack the barbecue chef with a newspaper for mischief points in Paperboy II.

All too soon, round 2 begins. Pick your targets carefully. Ships with red masts let loose with fiery shot that leaves permanent smoking holes in the ground — you can't build walls on them. Gray-colored ships unleash ground forces if they reach shore, so destroy them when you can. Once landed, these ground pieces crowd against your walls, blow holes in the stone, and shove their way inside. You've got to keep them at bay, too, because you can't rebuild walls atop the enemy army, either.

But Rampart's best action is in multiplayer mode. Up to three players can have at it, provided you have keyboard, joystick, and mouse. Destroying a human opponent is a bigger thrill and, frankly, a bigger challenge than beating the computer. Alliances form and crumble quickly once the siege begins. No mercy is shown to the vanquished. Losing even brings up a graphics image of your demise; those sea dogs make you walk the plank.

Rampart's a solid summer pick because its battles are quick campaigns. In many cases, especially early on, a round won't take more than a quarter hour. Like its arcade ancestor, Rampart on the PC is a frenetic few minutes of action, where you win or lose in moments, not hours and days. After all, who's got a long attention span in the summer?

READ ALL ABOUT IT

Every summer job should be this much fun. **Paperboy II** may let you pretend you're a working stiff, but it won't make you a dime. Still, it's worth a turn if you can't get a real job in these tough economic times.

In this arcade offshoot, you take control of a hot BMX bike, avoid unfriendly subscribers, and race to make your deliveries. Fail in your duties and people cancel subscriptions faster than the news gets old.

Paperboy II is arcade simple, one of the big reasons it's a great tonic for the summertime blues. You maneuver the paperboy (or papergirl) character through a neighborhood, throwing papers left or right as you ride, scoring points for hitting subscribers' mailboxes or stoops, or, in a sop to delivery fantasies, sending a rolled-up daily through the window of anyone who doesn't subscribe.

Paperboy II's route isn't the usual suburban sprawl. There are theme houses with mummies and fire-breathing dragons to avoid, and ramps you can leap for some air time. Traffic's heavy, too, so you need to watch where you're going or take to the sidewalk to complete your deliveries.

You also can play antisocial pranks for extra points. Hit the lawn sprinkler and spray a sunbather, toss one at the garbage collector, or knock Mr. Smithers into his pool. Hit the waiter at the sidewalk café, and he dumps pasta on yuppie diners. I won't even tell you what happens when you hit the backyard-barbecue chef. Along the way you re-arm with more papers retrieved from several randomly placed dumps. Danger's never far in Paperboy II, so be careful when you go for the extra papers.

You'll need your three lives — paperboys don't last forever, you know. If you don't complete your route you're both fired and humiliated in the offices of the *Daily Bugle*. Live through your first day, though, and you get a shot at bonus points in the BMX road rally, powering your dirt bike over jumps and avoiding obstacles. Finish a week's worth of work and you earn a promotion — at least, I think it's a promotion. The publisher gives you a longer route with more chances for mischief — and more chances to wipe out.

Paperboy II's two-player mode makes you share turns, but at least it keeps you from getting lonely. Arcade-action games are rare on the PC these days — Nintendo and Sega seem to have stolen most of that thunder and put it

on the TV, not the PC. Paperbox II is a grand holdout, a good arcade game that translates well to the desktop. And there's nothing better for some quick fun than an arcade game. You'll be playing Paperboy II as soon as you can get it on your hard-disk drive.

PINBALL WIZARD

"Ever since I was a young boy, I've played the silver ball . . . ." Dynamix promises to return you to the great days of pinners with **Pinball**, a Windows-working game that blows away that solitaire you've been playing to kill time. Put Pinball on your Windows-equipped PC, and not only will you get a first-rate game, but you'll save tons of quarters, too. What better way to save up for school in the fall?

Pinball: complete with garish colors, flashing lights, bumpers, chutes, and paddles.

Pinball's attraction may be hard to understand for the video generation, but for those of us who grew up nudging the silver ball back into play, reveling in the flashing lights and buzzers and bells, or hurtling toward a record-breaking score, pinball's got the character that too many on-screen games lack. Pinball on the PC translates that arcade feel to the screen with alarming ease. In fact, about the only thing it doesn't do is let you bang the side of the monitor.

Long on sound effects and options, Dynamix's Pinball will surprise you with its realistic action. In multiplayer mode, you can keep a crowd around your screen all day when your softball game's rained out.

Garish colors prevailed on the old metal-legged machines, and the same goes here. The playing field offers bumpers, chutes, and paddles just like its ancestors. Vary ball speed to your liking and bounce, spin, and carom your way to a high score.

Although I saw only a work in progress, the designers even promise a "nudge" key to let you digitally shove this virtual-reality version of pinball. (You just can't play pinball without the possibility of a tilt, I suppose.) For an even wilder kind of pinball, select the *String* feature from the *Options* menu. The ball plays as if it's connected to the paddle with a rubber band. Plans for the final version also include a warped-gravity game.

Like Super Tetris for Windows, Pinball works under the graphical interface, so it's an easy-in/easy-out procedure to quit real work and run through a round of silver balls. If you think your PC's too good for this old stalwart, think again. You'll be surprised by how much fun Pinball brings to those long summer nights.

SEE YOU IN SEPTEMBER

Four cures for the summertime blues, these games are easy to learn and quick to finish. Once Labor Day passes and the leaves begin to fall, you'll spend more time inside; that's the season for cooking up a pot of chili and a 12-hour war-gaming marathon. For the next couple of months, though, put one of these on your PC to keep up your game-playing prowess without missing any of the really important summer activities — like the beach at Kitty Hawk, the roller coaster at Six Flags Over Texas, or the family vacation to Yellowstone.

Of course, you could always drag out a long, long, long extension cord, and sit in the shade somewhere . . . . ❑

PRODUCT INFORMATION

Paperboy II
Mindscape
60 Leveroni Court
Novato, CA 04040
(415) 883-3000
$49.95
512K IBM PC, Tandy, or compatible
DOS 3.0 or later
EGA, VGA, Tandy-16
supports AdLib, Sound Blaster

Pinball
Dynamix/Sierra On-Line
P.O. Box 978
Oakhurst, CA 93644-9899
(800) 326-6654
$49.95
2MB IBM PC, Tandy, or compatible
Windows 3.0 or later
VGA
supports AdLib, Sound Blaster
requires mouse, hard-disk drive

Rampart
Electronic Arts
1450 Fashion Island Blvd.
San Mateo, CA 94404
(800) 245-4525
$39.95
640K IBM PC, Tandy, or compatible
VGA
supports AdLib, Roland, Sound Blaster
mouse recommended
requires hard-disk drive

Super Tetris for Windows
Spectrum HoloByte
2061 Challenger Drive
Alameda, CA 94501
(800) 695-4263
$49.95
2MB IBM PC, Tandy, or compatible
Windows 3.0 or later
VGA, SVGA
supports Sound Blaster
requires mouse, hard-disk drive

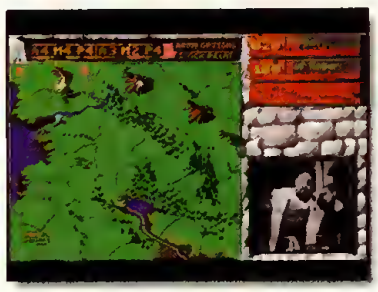
Do You Have What It Takes To Win The Crown?

CASTLES II
SIEGE & CONQUEST™

King Charles of Bretagne is dead, without a clear successor to the throne. In the Middle Ages, this means WAR! It's a war you intend to win, and a crown you intend to wear. Unfortunately, other inhabitants have the same idea.

CASTLES II: SIEGE AND CONQUEST™ is a game of medieval diplomacy, treachery, and power. To win, you must survive. To survive, you must scout the surrounding territories, defeat the native militias, subjugate the land with castles, feed and maintain the people, forge diplomatic alliances, appease the church and unite the land under your iron fist. Did we forget to mention the other power hungry barons? They're out to gain the same crown and you sit squarely in their path.

CASTLES II: SIEGE AND CONQUEST is a completely new game system, based on the best-selling *CASTLES*™. In addition to building castles, you can now siege, attack and destroy them. Forge political and military alliances with the other computer players, or fight and conquer them in the fields or in their castles. Scout unknown territories, spy on and sabotage enemies, recruit infantry and cavalry, gather gold and grain, mine for iron, trade for timber and stone, research new weaponry, and pay the church for indulgences ...just a few of the fun things that go into a good, medieval day's work!



- *A completely new military, diplomatic and administrative strategy game based on the best-selling CASTLES™*
- *Multiple computer players*
- *Ability to attack and defend*
- *Different story lines based on which personality you play*
- *Multiple ways to play and win*
- *Digitized movie footage*
- *VGA graphics and complete sound board support*

To order CASTLES II: SIEGE AND CONQUEST™ call 1-800-969-GAME, or see your local retailer.

Coming Soon on MS-DOS!

MS-DOS Screens Pictured.

Circle 62 on Reader Service Card.

Interplay™

Interplay Productions
3710 S. Susan, Suite 100
Santa Ana, CA 92704
(714) 549-2411

© 1992 Interplay Productions. All rights reserved.
CASTLES: SIEGE AND CONQUEST™ and CASTLES™ are trademarks of Interplay Productions, Inc.

TAKE 2

PLAY IT AGAIN...

. . . and again. We're swimming in series and sequels — but when game players latch onto something, game publishers are loath to let go. Sales figures talk, and developers listen.

THERE'S NO SUCH THING AS AN ORIGINAL GAME: They've all been done before. You can fill a dumpster with software titles that depend on horizontal scrolling, jumping characters, and rabid opponents. Dozens of fantasy role-playing games, for example, owe ancestry, if not allegiance, to the original paper-and-pencil Dungeons and Dragons, which, in turn, stole content and quests from fantasy novelists. Spot a popular piece of software, glance around the corner, and you're sure to find imitators and clones.

So why do electronic-entertainment publishers go out of their way to push the process even further with sequels and second chances? Why do we keep getting Ultima X, Where in the X Is Carmen Sandiego?, SimX, and XTris?

It's money, guaranteed sales, reduced risk, happy customers, and money — pretty much in that order. Software publishers, like any creative business types, like to make what sells and sell what they make.

They're no different from movie-studio moguls who crank out summer sequels to popular hits of the past, or even book publishers, who itch at the thought of another novel from a best-selling writer. When gamers latch onto something, game publishers are loath to let go. But when publishers dip into the same well, will gamers want another drink?

By Gregg Keizer

COMING SOON
NOW SHOW
SEQUE

MICROCOMPUTER METHUSELAHS

You don't have to look too hard or too far to spot the sequels in the software business — just look for a Roman numeral at the end of a title. Several of these series go back almost to the dawn of personal computing; some literally began the computer-game industry. Sierra's **King's Quest**, for instance, is ten years old, and started on the Apple II, a machine that has since faded as a gaming powerhouse. MicroProse's **F-15 Strike Eagle**, now ready for its third incarnation, virtually founded the company. And Broderbund's **Where in the World Is Carmen Sandiego?** series rescued the firm from its one-trick-pony days as publisher of **The Print Shop**.

But games with "legs" — the ability to sell over an extended period — are the exception rather than the rule in PC entertainment. Most titles, if they make it to the retail shelves in any numbers at all, don't stay there long. Software titles may not be as disposable as paperback books, but they can cycle through the selling process just as fast.

It's no surprise, then, that when publishers stumble across a formula that works, or an imaginary world that strikes a chord in its players, they start recycling names and adding numbers. By virtue of their long, long lives, these game series typically hog the all-time best-seller charts; by virtue of their built-in audience, they usually top the monthly charts, too.

A glance at just some of these series shows you how pervasive sequels are; the list reads like computer entertainment's version of *Who's Who*:

• **Wing Commander.** Although a recent addition to the series ranks, Wing Commander has generated not only a direct sequel, but also a slew of add-on disks that extend the adventure. It also has broadened Origin's software base beyond **Ultima**, and has been a major contributor to that publisher's growth.

• **Ultima.** Now in its seventh incarnation, Ultima has continued to push the technology envelope on the PC. The decision to move this role-playing giant from its Apple II birthplace to the then-unproved PC may have seemed risky years ago, but in hindsight it was one of the savviest moves of the decade.

• **Where in the World Is Carmen Sandiego?** More a series than a collection of sequels, Carmen has gone around the world and across the country, invaded the continent, and gone back in time twice. Only a series as strong as Carmen could have spawned not only books and board games, but a PBS TV show, too. This five-part series is easily the best selling "edutainment" title ever.

• **Tetris.** This game breaks most of the rules for sequels and series. It's not a simulator that depends on hardware advances for its next version, nor is it a plot-driven adventure with an open story line and likable characters. Still, this addictive puzzle arcade game has given birth to a quartet of similar games: **Welltris**, **Faces**, **Wordtris**, and **Super Tetris**. None has shared the wild success of the original, but Spectrum HoloByte keeps trying.

• **John Madden Football.** Sports games rarely show up on sequel lists, perhaps because so many are tagged to real-life celebrities whose charms can vanish almost overnight. John Madden Football, now in its second version, took the same approach as flight simulators — it upped the ante in graphics and features as the hardware became more powerful.

• **Leisure Suit Larry.** One of several series from Sierra (others come from the **Quest** lineup — King's Quest, SpaceQuest, PoliceQuest, and Quest for Glory), Larry Laffer has appeared in four titles so far. Just as the James Bond movie series keeps putting 007 in still more exotic circumstances, Leisure Suit Larry finds himself in ever-more-erotic locales and plot lines.

Name almost any other successful game and it's likely to be a sequel or part of a series, or at least offer disks to extend its life span. **PGA Tour Golf**, **LINKS**, **Lemmings**, **Reader Rabbit**, **Math Blaster**, **HardBall**, **Test Drive**, **Might and Magic**, **Eye of the Beholder**, and **Microsoft Flight Simulator** are but a handful of titles that have seen a rebirth two, three, even four or more times. We're swimming in series and sequels.

DOLLARS AND SENSE

Where does the push for sequels come from — players or publishers? Some software publishers would like to claim that the vocal demands of players force them into the sequel business. Take that with a grain of salt. Game players do voice opinions, of course, but those opinions are expressed in dollars, not words. Sales figures talk in the electronic-entertainment industry, and when they talk loudly, publishers listen.

"A quality game today costs a million dollars to build," says Ken Williams, president of Sierra. "No one's willing to put that kind of money into something that's uncertain. You have to have a proven audience."

According to Williams' approach, only those games that have sold well before can be guaranteed to do well in the future. And that guarantee is essential to good business planning. "I'd be perfectly happy to market the first in a new series," claims Williams. "But you just can't estimate how many copies you'll sell. You can't put a million dollars into something that might sell only 10,000 copies. You need to have a unit-sales estimate [before] you venture into something."

Richard Garriot, the creator of Origin's Ultima series, echoes some of the same opinions. "[Sequels] are reliable and predictable sellers," he says. "Once you've found a presentation that people enjoy, that makes money, you shouldn't abandon those buyers. Once you've developed expertise in a market area, you're better suited in that market area than others are. It makes good fiscal sense."

Both Williams and Garriot liken sequels in computer games to those in film. The similarities are intriguing, especially on the money side.

"Do you think they would have given $60 million to Tim Burten for *Batman Returns* unless he'd done *Batman*?" Williams asks rhetorically. "[The decision to do game sequels] has more to do with the ability to raise money for a product than anything else."

Sierra may be one of the kings of sequels and series — the company's core games are all long-lived lines with three or more episodes on their résumés — but other publishers look at sequels as cash cows, too. "You want to build on some sort of success," says John Baker, vice president for product development at Broderbund, makers of The Print Shop and Carmen Sandiego franchises. "In a sense you're talking about money," he admits. "We're doing the same thing as people who do movies. We want to build on a successful project, and to expand the audience."

Because sequels are relatively safe bets — if anything in game development and publishing can be a safe bet — recycled titles, characters, and plot lines continue to appear. But expected revenues are only part of the reason today's electronic-entertainment makers turn to sequels and series.

AMORTIZATION

If game development is so expensive, it makes sense to spread that cost around as much as possible. Some publishers are doing just that, and in the process either extending their existing games or planning sequels even before the first version hits the shelves.

"Game design is a very tricky thing," says John Baker of Broderbund. "People spend a lot of time to make a game work, so when you accomplish that, you [should] go in and build on that game play. In a sequel, you don't have to worry about how the game works, [which makes] the job a lot easier."

Amortizing development costs across several products is smart, especially when games incorporate multimedia elements such as professional actors, musical scores, and video. Even non-multimedia titles benefit from shared costs, though, such as when a flight-simulator "engine" is reused in another program, or an interface design appears in an entire wave of games. The less reinvention the better, say many developers and publishers.

A few publishers have even invested in million-dollar development systems to create their current line of products. To recoup that investment, more games for those lines must be created, marketed, and sold, cementing sequels even more tightly into the development cycle.

The success of series and sequels convinces some publishers that every title should have sequel and/or series potential. Ken Williams of Sierra claims that every publisher should keep that thought in mind, while Broderbund's Baker says that "small companies have got to be thinking, 'Can we capitalize on this momentum?' whenever they launch a new title. We certainly think about this when we do things." He admits, though, that "we like to experiment, too."

CREATIVE CONSTRAINTS

Experimentation, or rather lack of it, is at the core of players' criticism of sequels and series. That criticism generally takes two tacks: that too many sequels are just more of the same, and that the emphasis on series squeezes out original, first-time titles.

The first may be as much the fault of game players as game designers, at least according to Eddie Dombrower of Mirage Graphics, the development team that created **Earl Weaver Baseball** and **Earl Weaver Baseball II**: "Because you rarely sell a sequel to a new buyer, you can't deviate too much from their expected interface experience, or from the

IN THE YEAR 1999

Old games never die, nor do they fade away. They just add another number to their names. Seven years from now, you'll see some familiar titles on the on-line distribution networks that will replace retail software stores and most mail-order houses. Although they may share only a name with what you play now, they'll still be sought by hordes of players eager for their next fix of Larry Laffer, Carmen Sandiego, or Lord British. Gaze with us into PCGames' crystal ball for a peek at the future of sequels and series:

• ULTIMA XII. After your escape from Britannia in Ultima XI, you may have thought the fantasy was dead. Wrong. Ultima XII: The Land of Lobbyists turns the corner into utter realism and transports you to present-day Washington, D.C., a fantastic world of evil monetary magicians and slingers of corporate influence. Your quest is simple: rescue the Capitol from the clutches of the roaming PACs and give government back to the people. Good luck.

• JUST WHERE IS CARMEN SANDIEGO? Carmen tired of the constant chase around the globe and through the galaxy (such as in Where in the Whole Wide Golldarned Universe Is Carmen Sandiego?) and hung up her crime cape. In this latest edutainment adventure, you must find Carmen and bring her back to Broderbund. Remember, the company's depending on you.

• FALCON 5.2. The real F-16 may be nearing forced retirement, but jet jockeys at the keyboard can still fly against enemies both real and imagined. Complete with helmet and a heads-up-display monitor, this deluxe edition lets you fly missions against the Japanese (re-creating the Battle of Sonyl and the drug lords of Detroit.

• ESPTRIS. The toughest Tetris clone yet, ESPTris features invisible pieces you stack for points.

• LEISURE SUIT LARRY IX. Larry's in jail, thanks to countless sexual-harassment suits. Full of double entendres and snickering jailhouse humor, this game turns the tables on Larry. Can he fend off William "Bubba" Coletrain and stay alive until parole?

— G.K.

style and type of results of the game. Still, you can't simply repeat the [first] game. You really have to walk the line between keeping that old feel and putting in new features. It's a tough decision."

But publishers push for more of the same too, often purposefully. "Hits are rare in any industry, so when you get one, treat it with respect," says Ken Williams. "Once you figure out what [the buyers] want, give them more of the same."

In fact, Williams considers those who would "fix" a successful game the most dangerous of all designers: "I have an intense belief in studying the original formula" of a series, he says, adding that one of his toughest tasks is "fighting new people on the scene who think they can make it better and greater. What kills a series is when someone tries to fix it, to make it better when better means different."

"Series are what keep you going between the really innovative designs," admits Andy Hollis, MicroProse's simulations group producer, and the man in charge of F-15 Strike Eagle.

But are those series and all their sequels so big, so important, to a publisher's future that they crowd out anything new? For an answer, just stroll down the aisle of your local software store, or glance at game best-seller lists. Of the hits of last year, for instance, Lemmings stands almost alone as a first-time game; in fact, several people interviewed for this feature mentioned Lemmings specifically as an example of a successful initial effort. (But what's one of the first things Lemmings' publisher did? Capitalize on its success by offering an add-on disk, one of the first steps toward serialization or a sequel.) The fact that Lemmings is alone in its success speaks volumes about how pervasive series and sequels have become.

Are we in danger of drowning in sequels? "Absolutely," says Richard Garriot, creator of the Ultima series. "I think many of them are overused."

Eddie Dombrower, the Mirage Graphics designer, agrees: "I think [the trend toward series] is a little bit dangerous — very dangerous when you just use the title and pump out the product. It's almost inevitable that we'll see 70 to 80 percent of the games as either sequels or part of a series. It's a foregone conclusion."

DIFFERENT BUSINESS

Comparisons between movie and game sequels come naturally, if only because both often peg their newest with a number: *Rocky V*, **Ultima VII**, *Aliens 3*, **Magic Candle II**.

The comparison doesn't hold up under scrutiny. Hollywood's sequels are concentrated in the summer, while game sequels are released throughout the year. (Although that's as much owing to late arrivals as to original scheduling.) Seconds and thirds at the movies rarely better the original at either the box office or among the critics; exceptions such as *Aliens* and *Terminator 2* do exist, but they're outnumbered by bombs such as *Meatballs II* and *Predator 2*.

Most PC-game sequels, though, are much better productions than their ancestors. Credit changing computer technology for that; Ultima VII, for instance, is a much more compelling story than the first Ultima mainly because its graphics, sound, and animation are flashier and more realistic.

"We're working in a medium where the technology is changing at a rapid rate," notes Richard Garriot. "And with an evolving technology like this, each sequel can be a profoundly different incarnation of the original. That's why Ultima, at least for me, is really a unique product each time I do it."

Because the technology continues to evolve — better sound, better graphics, CD-ROM, and on the distant horizon, virtual reality-style gear — sequels can effectively tell the same "story" again and again, each time presenting what players see as something totally new. Flight simulators excel at such recycling by improving the flight-dynamics modeling, the polygon-graphics shading, and the complexity of the aircraft.

Sequels aren't going away, that's for sure. "Sequels have a tremendous advantage," says Eddie Dombrower. "That advantage puts pressure on both the publisher and the developer to make sequels."

"No one wants to do a sequel, but you don't have a choice," adds Ken Williams.

The trend toward more sequels and fewer first-time games is evident everywhere. Business-planning pressures, a more-assured rate of return, and a dedicated, even fanatical, audience mean that sequels and series will become even more entrenched in electronic entertainment. ❑

WHERE'S PART 2?

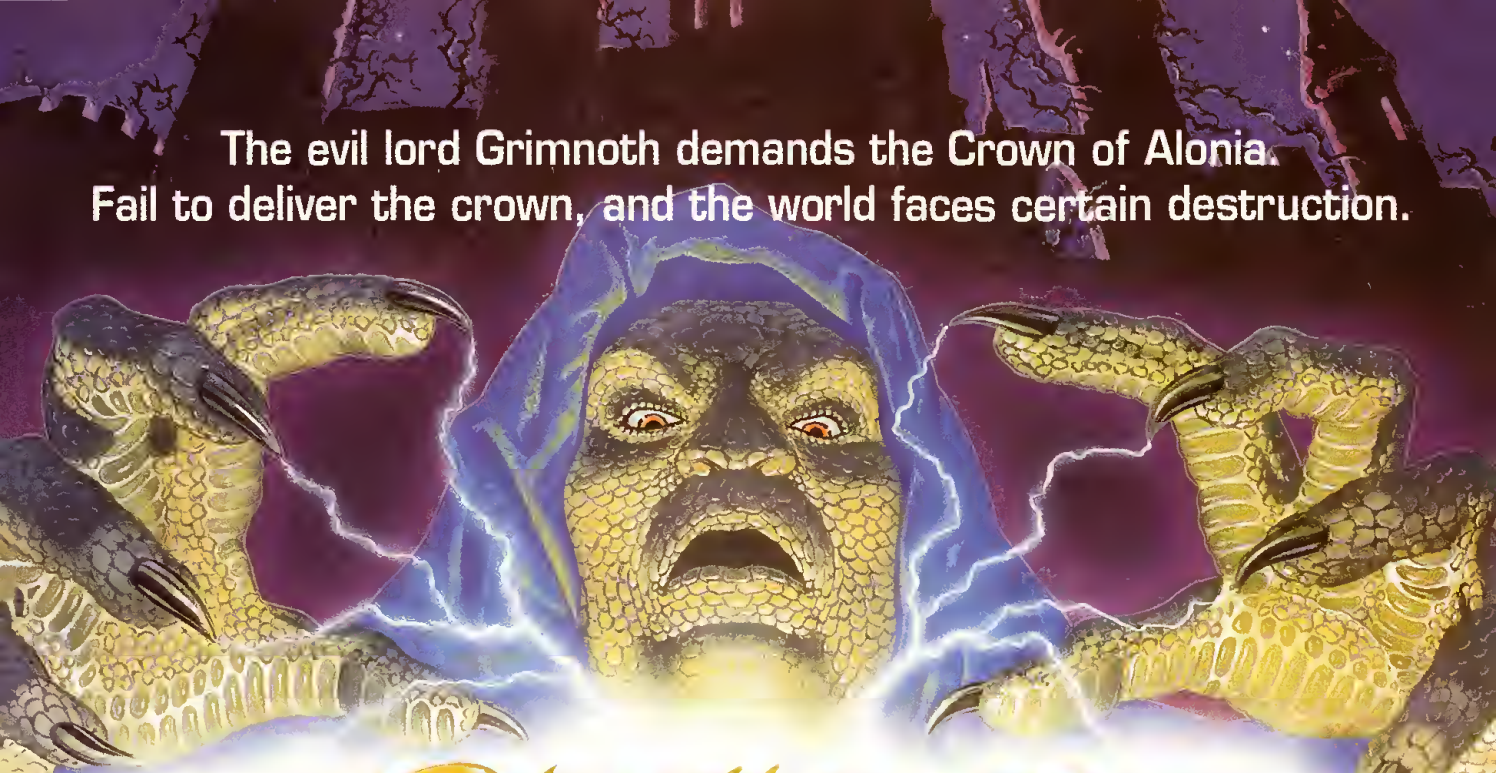
Contrary to what you might think by the time you get to the end of this article, not every game comes in splintered parts spread across years. In fact, there are games that have just one life, not nine. Among those are games that merit a second chance, not because they were weak to begin with, but because they were so good that gamers deserve another shot.

Here are three titles we'd like to see carry a Roman numeral someday:

• CIVILIZATION. Sid Meier took us from pastoral nomadic life to the beginnings of interstellar empires, but then, like a good serialist, stopped. Civilization II should open up the galaxy to empire builders, budding diplomats, and entrepreneurial traders.

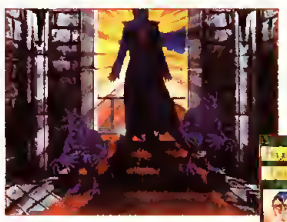
• BALANCE OF POWER. This Chris Crawford-designed classic, now sadly outdated, needs a facelift and a transfusion of current events. Balance of Power II should show us how conflicts in the 1990s will be decided by economic power, not military strength.

• KIDPIX. Broderbund's award-winning paint program for kids, where explosions erase the screen and stamped letters talk, begs for some sequels. KidLix (music), KidHax (writing), and KidMax (math) should follow in quick succession. — G.K.



Challenge of the Five Realms

Spellbound In The World Of Nhagardia™



The multi-dimensional world of Nhagardia is quickly becoming paralyzed by Grimnoth's terrifying plague of darkness. As Prince of Alonia, you now have 100 days to keep the world from being cast into eternal despair!

But is 100 days enough? After all, in addition to confronting Grimnoth's evil forces, you'll have to unlock the many mysteries behind his power. You'll need to overcome the myriad obstacles that dot each realm. What's more, by accepting this great challenge, you'll be the first in many centuries to traverse the five magical realms of Nhagardia. Which means there's no telling what you're in for!

Will the fantastic beings you need to complete your quest actually come to your aid? Will you have the mettle to survive adventures in a vast underwater land or a magical kingdom in the sky? And will you find all the clues and enchanted objects you need to break Grimnoth's sinister spell?

Your actions will determine your fate as you journey through Challenge of the Five Realms, an original fantasy role-playing adventure from adventure gaming hall-of-famer Marc Miller.

Challenge of the Five Realms will thrill you with a multitude of wondrous and unpredictable scenarios. Scenarios brought to life by hundreds of strange and magical beings, compelling animations, captivating digitized speech, streamlined character generation, and spellbinding graphics!

Grimnoth has thrown down the gauntlet. Now are you brave enough to pick it up?!!

MICROPLAY™ SOFTWARE

Marketed by MicroProse Software, Inc.

Call 1-800-879-PLAY

180 Lokefront Drive, Hunt Valley, Maryland 21030-2245.

© 1992 MicroProse Software, Inc. ALL RIGHTS RESERVED.

For IBM-PC/Tandy/compatibles

Actual screens may vory.

Circle 78 on Reader Service Card.

The Art of Fun

REMEMBER HOW IT FELT TO DRAW THE IDEAL RACE CAR OR BEAT OUT YOUR FIRST REAL DRUM ROLL? RECAPTURE THAT EXPERIENCE TODAY — RIGHT ON YOUR HOME PC.

Fun once came in a 16-color Crayola box, not on a 256-color VGA screen. Kids' entertainment used to march to the beat of a wooden spoon banging on a pot, not to the digitized rumble of a revved-up CD-ROM drive. But times change.

Children and adults still need to play creatively, but computers have altered the amusement landscape dramatically. Software publishers may not have figured out how to re-create the squishy feeling of fingerpaints or the cool touch of a brass instrument, but they *have* managed to reproduce the excitement of finishing an artistic project. If you can remember how it felt to draw the ideal race car or beat out your first real drum roll, you'll be glad to know that you — and your kids — can capture that feeling again with several PC packages.

You may not see these four programs ranked under the *Games* banner at your local computer store, but that doesn't mean you can't count them as software toys. To kids, who revel in the fun they have with paints, markers, xylophones, or tuned pianos, PC titles like these aren't educational or creative. They're just plain fun.

MOVE OVER, NINTENDO

KidPix is the most entertaining graphics program on the market. This Broderbund package mixes ingenious painting tools with amusing sound effects, creating a friendly graphics environment that invites kids to experiment. The interface is easy to follow, so children hardly need to consult the manual.

KidPix features paintbrushes, rubber stamps, and special effects that will keep you giggling for

By Heidi E. H. Aycock • Illustration by Richard Anderson

hours. Choose the paintbrush tool and look at the bottom of the screen. Some of the 16 different brushes there simply draw patterns — trailing bubbles or the alphabet — while others perform stunts, such as dripping paint or sprouting a forest of trees.

After you've tried the brushes, check out the antics of the mixer tools. The broken-glass tool shatters the image you've created, while the splash tool splatters your painting with blobs of color. Twelve other tools twist, warp, and distort your masterpiece even further. KidPix even makes your mistakes fun. You can use the typical square eraser, which clears the screen as you rub away the error, but for some fireworks try the dynamite that explodes your picture. KidPix features ten wacky erasers.

KidPix also features rubber stamps, a digital duplicate of the colorful stickers kids collect. Pick a stamp from the menu — all the alphabet's here, as is a set of 48 pictures that imprint everything from a lightning bolt to a whale — and click the mouse. By holding down the control and shift keys, you can even double and triple the size of the stamp.

Rounding out the package are several easy-to-use editing tools. To cut, copy, or paste an

image, you just click on the move tool, draw a rectangle around a portion of your picture, and drag it somewhere else. If you want to reverse the last thing you did, click on the "undo guy."

KidPix is a visual blast. Pictures take shape easily and shift shapes just as simply. If you have a compatible sound card, KidPix is just as entertaining for the ears as it is for the eyes. Each tool has its own sound effect. When you fill a shape with color, you hear the gloppy sound of paint pouring into a bucket. When you click on the undo guy, he says, "Oh no!" and "Oops." And as a special treat for young children, KidPix pronounces the name of the letter they choose from the alphabet stamps.

These tools and sound effects combine to create more than just a nice graphics package. KidPix encourages creativity and experimentation. The stamps are especially good at helping kids overcome fear of the blank page. They don't even need to think about beginning — they just choose a stamp and click on the screen. Suddenly the page isn't empty anymore. Choose a brush and add a few more images to the screen, mix up the page with a checkerboard background, fill some of the objects with different colors. After a few minutes, the screen is packed with shapes, color, and texture. What started with a simple stamp becomes an abstract masterpiece.

The beauty of KidPix is that anything you do — any brush you use, any color you apply, any stamp you try — adds to the on-screen art project. You can't make a mistake. The program even includes those erasers because they change the picture, and not because they correct errors. The process becomes as rewarding as the outcome.

KidPix's rubber stamps make it easy to create a masterpiece from a blank page.

KidPix doesn't ask whether you can draw the perfect race car. Instead, it asks what you can do with a picture once you've drawn it. This software program gently gets children to consider the image, not its limits. Freedom like this is hard to find — and fun to apply.

SERIOUS ENTERTAINMENT

While KidPix frees children's creative instincts, **Windows Draw** gives them more-sophisticated tools to develop those instincts. KidPix offers ease of use and an entertaining presentation to get kids involved in a graphics project, but when they're ready to do some serious drawing, Micrografx's Windows Draw is the best choice going.

Windows Draw's fun may be more sedate, but it's still an absorbing experience. The tools are as powerful as they are easy to use. The Windows interface is well designed, making it simple to learn as you explore. You won't hear any clever sound effects, but you will produce some fantastic pictures.

To start, click on the pencil tool and choose a drawing object from the ribbon at the top of the screen. You'll find ellipses, rectangles, rounded rectangles, arcs, polygons, Bezier curves, and straight lines — all the options you'd expect from a full-featured graphics package for the office. Besides shape tools, the ribbon also sports a button that takes you to a menu where you can change the width and color of a line. Here you'll also find 14 different line ends, such as arrowheads, squares, and circles. The same ribbon guides you to the *Fill* menu, where you choose and edit textures, colors, and gradient effects.

The pie-chart tool is an unexpected treat; it lets you draw a circle and break it up into pieces, each an independent object, ready for the same kind of editing you can perform on any other object. This tool is ideal for presentations, whether for the home office or the classroom.

With a few shapes on screen, try some other tricks. Each tool lets you manipulate a shape in different ways. The reshape tool, for example, lets you drag a shape's anchor points and turn a rectangle into a trapezoid. Add a couple new anchor points to that rectangle and you've changed a four-sided box into a five-pointed star. Other tools rotate figures, tweak Bezier curves, smooth out rough lines, and unsmooth curvy shapes.

Besides these drawing and editing tools, a simple but powerful text tool lets you add the power of the pen to your pictures. A view tool magnifies your work so that you can fine-tune your masterpiece.

Under the menus you'll find Windows standbys such as *Cut*, *Copy*, and *Paste*, as well as options for complicated chores. The *Change* menu is the most interesting, because it sports commands to wrap text around curves, align shapes, or transform letters into objects you can twist and fill with color.

But Window Draw's most impressive *Change* menu command is *Blend*. Choose two shapes on your page — a blue star and a red triangle, for example — then select *Blend* and the number of steps you want the program to use to go from one object to the other. Windows Draw automatically inserts the images that would logically occur between the two shapes you selected. In our case, the program draws three different shapes from deep blue, to purple, to maroon, each one with fewer angles until the five-pointed star becomes a three-pointed triangle.

Windows Draw is particularly well suited for teenagers who might balk at using something as whimsical as KidPix. They can explore their creative ideas without the messy overhead of art supplies, and without the frus-

tration of crumpled false starts. And because Windows Draw can do double duty as a home-office or small-business graphics program, it's a bargain for any household computer. Older kids might laugh at KidPix, but they'll see Windows Draw as the powerful tool it is.

With the tools in Windows Draw, older kids can create professional-quality art.

AN EXCELLENT ADVENTURE

If you think music history comes from dusty classrooms with musical staffs etched on the chalkboard, think again. **Composer Quest**, a CD-ROM disc from Dr. T's Music Software, takes you on an entertaining journey through musical time. Composer Quest covers seven historical periods of classical music and three periods of jazz. As you travel through time, you read biographies of composers, listen to short clips of their notable works, and learn about contemporary achievements in art, science, and philosophy.

Much of Composer Quest's information comes from clearly written, though dry, passages that sound as though they've been drawn from textbooks and encyclopedias. A relevant picture accompanies each block of text. When you read about Haydn, for example, you see his face staring back at you. From the composer-biography screen, you can access a representative list of his works, and, best of all, hear the music. If you're reading about Bach in the Late Baroque era, you can click on *Toccata and Fugue in D Minor* and hear the classic *Phantom of the Opera* movie theme.

To get an even better idea of the times in which each composer worked, click on the *Arts in History* or *Historic Era* buttons. *Arts in History* brings up a passage about the activities of painters, sculptors, and architects. If you're reading about Bach, for example, this button brings up an article about English painter and printmaker William Hogarth and German architect Johann Balathasar Neumann. As always, the text is followed by a picture of one of the pieces produced by an artist of the period. The *Historic Era* button reports on other events. In Bach's case, you'd read about the Age of Enlightenment, Descartes, Voltaire, and Rousseau.

You can approach Composer Quest in two ways. In *Learn* mode, you move from musical period to musical period at your own pace. Play *Game* mode, and you'll race against the clock as you learn some musical history.

In *Learn* mode, you gauge your progress by taking quizzes on the musical periods you've read about. Resembling reading-comprehension questions, these multiple-choice tests cover music, art, science, and philosophy. In *Play* mode, you hear part of a musical piece; your job is to figure out which composer wrote it. You win by traveling in a time machine to the period of the correct composer, clicking on him, and then clicking on the name of the piece. You might hear the theme song to the movie *2001: A Space Odyssey*, for instance, so you'll set the time machine to travel to a date between 1861 and 1899 — the Romantic Period. Find Richard Strauss and click on his picture, and a bell signals that you've picked the right composer. But what's the real title of the piece? There's no *2001: A Space Odyssey* listed; instead, you see *Thus Spake Zarathustra*. Click on it, and another bell signals another correct choice. You win the round.

Kids can explore music and art history with Composer Quest.

The game doesn't rack up points, but it does record how long you spend finding the correct composer. Even when you have to guess at the answer, you'll enjoy roaming around in the time machine, learning as you explore.

Composer Quest is a great introduction to music history, but, like a tasty first course, it merely whets your appetite. A good sequel to this game would offer more links among readings and more freedom to explore. As an appetizer, though, Composer Quest is an entertaining journey into a world of beautiful music.

FIVE-FINGER FLUENCY

For most kids, practicing on the piano qualifies as torture, not fun. Many adults, though, look back at those forgotten lessons as lost opportunities. **NotePlay** may help you rediscover those opportunities, and help older children find them for the first time. Part of the *Interludes* series of tutorials from Ibis Software, this program teaches you to sight-read music.

Through 36 drills, you learn to identify notes on a grand staff. Once you've finished, you'll be ready for almost any sheet music. The program accepts input from the mouse, the keyboard, or a MIDI keyboard. Don't bother with the mouse — it's practically impossible to use and teaches you very little. A better bet is the keyboard: At least you'll get proficient at reading music. Unfortunately, the keyboard doesn't help much in teaching you to play music, for the latter half of the lessons demand such complex note combinations that you won't be able to complete them with the keyboard. A MIDI keyboard is the ideal tool for NotePlay. Not only will you learn to read notes, but you'll also learn proper fingering.

Although NotePlay is nothing more than a drill-and-practice package, it hides within the guise of a game. The program displays four notes on a

grand staff (the familiar two-level staff with a treble clef on the top and a bass clef on the bottom). You read the notes and play them on your input device of choice. Each time you play the four notes correctly, four more appear. On screen, a timer bar fills to show how much time has elapsed. Below the timer, another bar tracks your progress. If you fill the progress bar before the timer bar is full, you move to the next level.

Learning the grand staff wins the game in NotePlay.

To help you track your progress — and to make the learning process more fun — NotePlay's designers have created a complex scoring system. On the left side of the screen, a score box keeps track of your total number of points. On the right side, a second box records your bonus points. Each time you play a note correctly, you earn 100 points plus the bonus, which increases each time you play a note correctly. To encourage you to emphasize accuracy over speed, NotePlay zeros the bonus each time you play a note incorrectly.

Even though the scoring system is complex, NotePlay's interface is clear and simple. You control the whole game through five menus. The *Options* menu lets you begin the lessons at any level, so if you're new to sight-reading, you can begin at the *Just Starting* level, which introduces a few notes at a time. If you're comfortable with reading music, though, try the *Not Bad at All* level, which introduces new keys and reinforces two-handed playing. Feeling gutsy? Try the *Virtuoso* level, where lesson 32 challenges you to play some "triads with bluesy melody." Other menus offer *Help* and *Scores*. Function keys activate game controls — particularly helpful is F3, which lets you restart a level. The spacebar pauses a game, giving you a chance to catch your breath after your first adventure in two-handed exercises or triads with melodies.

NotePlay wraps an ordinarily tedious activity in the trappings of a game. Earning points seems to make the medicine go down much more easily. NotePlay's designers have carefully balanced the competitive aspect of the game with the educational aspect. If you've always wanted to learn to play the piano, but skipped outside instead, you'll see what you were missing when you decided to play baseball instead of Bach.

ARE WE HAVING FUN YET?

Achievement may be measured most easily by points, but fun is another matter altogether. Fun is measured by how quickly time passes. Fun is measured by how happy you are with the results of your play — whether you spent five minutes or five hours. Children know this better than anyone. They become absorbed in a finger-painting project and somehow sit still for more than a few moments. They sing along with their teachers, and before they know it, the bell's rung.

At home, parents can reproduce these entertaining, creative activities for their children and for themselves. Besides mixing up a batch of homemade play dough or pulling out the pots and pans for a makeshift drum set, moms and dads can switch on the computer. It may not sound as romantic as fingerpaints and toy drums, but software won't stain the carpet or give you a headache. It's the toybox of the '90s. ❑

PRODUCT INFORMATION

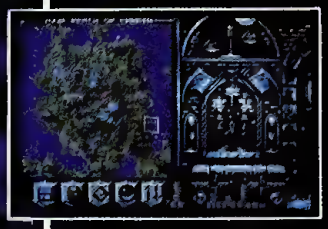
Composer Quest
Dr. T's Music Software
124 Crescent Road
Needham, MA 02194
(617) 455-1454
$99
MPC-compatible (8M PC, Tandy, or compatible system
386SX or faster, 2MB RAM
DOS 3.1 or later
Microsoft Windows 3.0 with Multimedia Extensions 1.0 or Microsoft Windows 3.1
30MB or larger hard drive
CD-ROM drive with sustained 150K/sec transfer rate and one second or less average seek time
MPC-compatible sound board (AdLib Gold, Pro Audio-Spectrum, Sound Blaster Pro)
mouse

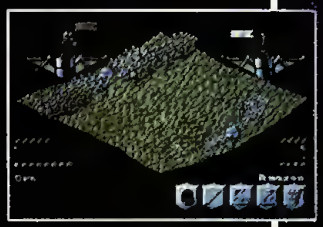
KidPix
Broderbund Software
500 Redwood Blvd.
P.O. Box 6121
Novato, CA 94948-6121
(415) 382-4400
$59.95
640K (8M PC or compatible
EGA, VGA, MCGA, Tandy 16-color
supports PS/1 Sound Option, Sound Blaster, Sound Source, Tandy sound
requires hard-disk drive
requires mouse

NotePlay
Ibis Software
140 2nd St.
Suite 603
San Francisco, CA 94105
$49.95
(415) 546-1917
640K (8M PC, Tandy, or compatible
DOS 2.0 or later
Hercules, CGA, EGA, VGA

Windows Draw
Micrografx
1303 Arapaho
Richardson, TX 75081
(800) 733-3729
$149.95
1MB (8M PC or compatible
2MB, 386 or faster recommended
Microsoft Windows-compatible graphics adapter (EGA or better)
DOS 3.1 or higher
requires Microsoft Windows 3.0 or later
requires hard-disk drive (40MB or larger recommended)
requires mouse

REALMS™





The King is dead. Long live the new King - you.

Endowed with the divine right to rule, your father bequeaths to you his Realm. Unfortunately, as your sphere of influence grows, so does the resentment from the rulers of neighbouring Realms. Jealousy is such an ugly thing.

The fragile peace has been shattered and war rages between the Realms. Now your brief reign has become a fight for survival. The neighboring Realms are growing in strength at your expense.

Do you build lines of supplies to barter with them? Or do you build armies to battle with them? Each Realm vies to be the ultimate power.

But there can only be one. Just make sure its yours.

Virgin® GAMES

Enter the world of REALMS and you could control:

- *OVER 125,000 SQUARE MILES OF FRACTALLY-GENERATED LANDSCAPE*
- *128 ARMIES, EACH A THOUSAND STRONG WITH DEFINABLE BATTLE FORMATIONS*
- *SIX DISTINCT HUMANOID RACES*
- *COUNTLESS FOLLOWERS AND THEIR MONEY IN INNUMERABLE CITIES*

Created by the award-winning Graftgold development team, REALMS combines the intuitive playability of an arcade game with the depth of strategy usually found only in the most complex simulations.

LOVE THY NEIGHBOR ?
OR PUT HIM TO THE SWORD?
THE CHOICE IS YOURS.

DEVELOPED BY GRAFTGOLD Creative Software

AMIGA SCREEN SHOTS SHOWN.

Realms is a trademark of Virgin Games, Inc © 1991 Virgin Games, Inc. All rights reserved. © 1991 Graftgold Ltd
Virgin is a registered trademark of Virgin Enterprises, Ltd. Illustration by Dermot Power

FOR PRICING AND ORDERS, PLEASE CALL 800-VRG-IN07. VISA, MASTERCARD, AMERICAN EXPRESS, AND CHECKS ACCEPTED.

Circle 37 on Reader Service Card.

CHIPS & BITS INC GAME SOFTWARE CALL 800 753 GAME

IBM WARGAMES

Action North Atlantic $26
Action off River Plate $26
Action Stations $29
Action Stations Scenario $14
Air Raid Pearl Harbour $26
Amer Civil War 1 - 3 Ea $22
Banzai $19
Battle of the Atlantic $36
Battle of Austerlitz $12
Battle Stations $26

In **'MIGHT AND MAGIC: CLOUDS OF XEEN'** you must lead a band of adventurers to bring down the evil Lord Xeen. Features full 256 color VGA support, full screen animation, animated icons to warn of danger, automapping, point & click interface, digitized speech, sourld effects, & musical score. **$39**

Battles of Napoleon $32
Battleship Bismark $26
Battle Tank Barbarosa $36
Battle Tank Kursk $36
Blitzkrieg Ardennes $29
Borodino $30
Bravo Romeo Delta $34
Campaign $29
Carriers at War $37
Carrier Strike $42
Charge Light Brigade $34
Civil War SSI $42
Cohort $34
Conflict Korea $37
Conflict: Middle East $37
Conflict in Vietnam $ 9
Decision at Gettysburg $29
Dreadnoughts $42
Dreadnoughts: Bismark $29
Dreadnoughts: Ironclads $29
Fall Gelb $36
Fifth Eskadra $36
Fire Brigade $34
Fleet Med $36
German Raider Atlantis $26
Gettysburg.Turning Pnt $37
Golan Front $36
Grand Fleet $36
Great Naval Battles $42
Grey Seas, Grey Skies $36
Halls of Montezuma $24
Harpoon $25
Harpoon Set 2 or 3 $19
Harpoon Set 4 $24
Harpoon Editor $27
Harpoon Challenger Pak $42
In Harms Way $36
Kampfgruppe $37
Kriegsmarine $36
Kursk Campaign $36
Long Lance $36
MacArthur's War $29

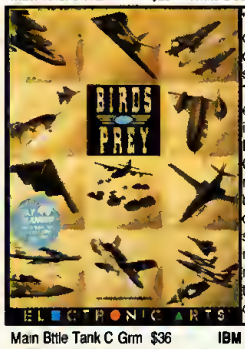
IBM WARGAMES

Operation Overlord $36
Pacific Storm Midway $36
Pacific Storm Solomons $36
Panzer Battles $22
Patriot $38
Patriot Battle Sets Ea $24
Patriot Editor $27
Patton vs Rommel $15
Patton Strikes Back $27
Prelude to Jutland $26

Red Lightning $12
Return to the Falklands $28
Rising Sun $26
Rommel at El Alamein $36
Rommel at Gazala $36
Rommel North Africa $24
Rorke's Drift $34
Second Front $37
Seventh Fleet $36
Stalingrad Campaign $36
Storm Across Europe $12
Third Reich $27

'SOLITAIRE'S JOURNEY' is a complete solitaire program. Choose from 105 of the world's most popular solitaire games. Features tournament play which allows you to create your own, keeps a complete history & overall averages for each game, 4 intriguing quests are included, & several play levels. **$36**

To The Rhine $36
Typhoon of Steel $12
UMS 2 $19
UMS 2 Civil War $24
UMS 2 Desert Storm $24
UMS 2 Planet Editor $28
V for Victory $39
War in the Falklands $26
Warship Changed Hist $26
Waterloo $12
Western Front $37
White Death $29



'BIRDS OF PREY' could be the most complete flight simulator ever. There are 40 different aircraft including the MIG 29, B1-B, and F117A. Choose between 12 mission types; bomb runs, troop drops, & reconnaissance. Features a real world environment with 3 terrain types, airports, & carriers **$32**

Main Bttle Tank C Grm $36
Main Bttle Tank N Grm $36
Main Bttle Tank ME $36
Malta Storm $36
Man of War $36
Mare Nostrum $26
Marianas Turkey Shoot $28
Midway $26
Moscow Campaign $36
North & South $27
Northern Fleet $36

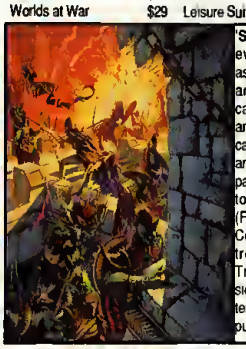
IBM STRATEGY

Castles $36
Castles Disk 1 $19
Centurion $19
Civilization $39
Civilization Master Ed $45
Commarld HO $19
Conquered Kingdoms $36
Crisis in the Kremlin $37
Designasaurus 2 $28
Dino Wars $28
DRAGON Force $31
Dragon Lord $12
Dune $29
Empire $31
Empire Deluxe $42
Final Conflict $34
FireTeam 2200 $29
FireTeam Const Kit $25
Fort Apache $34
Full Metal Planet $31
Genghis Khan $37
Global Conquest $39
Global Effect $32
Gold of the Americas $12
Impenum $26
Legions of Krella $38
Lemmings $32
Lemmings Data Disk $19
L'Empereur $37
Liberty or Death $37
Lost Admiral $34
Lost Admiral Scenario $23
Lost Admiral Enhanced $38
Lost Patrol $12
Medieval Lords $37
Medieval Warriors $15
Mega Lo Mania $31
Mercenaries $39
Merchant Colony $34
Millenium $24

Nobunaga 1 $37
Nobunaga 2 $37
Nuclear War $12
Objection $34
Objection Enh $89
Ogre $19
Omega $30
Operation Combat $15
Overlord $29
Pacific Theater of Oper $42
Perfect General $34
Perfect General Disk 2 $23
Populous $21
Populous Promise Land $14
Populous 2 $38
Power Monger $34
PowerMonger WW1 $21
QQP Burldle $59
Railroad Tycoon $34
Rampart $27
Reach for the Stars 3 $19
Realms $29
Renegade Legion Intrcpt $12
Revolution 76 $29
Rider of Rohan $19
RoboSport WIN $37
Romanc 3 Kngdm 1or2 $42
Rules of Engagement $37
Secorld Conflict WIN $34
Siege $38
Sim Ant $37
SimCity $29
SimCity for Windows $37
SimCity Graphic 1 or 2 $23
SimCity Terrain Editor $15
SimEarth DOS/WIN $41
Star Control $29
Star Control 2 $37
Starfleet 1 or 2 $38
Strategic Forces $19
Sword of Aragon $28

IBM STRATEGY

Task Force 1942 $39
Theatre of War $32
Theatre Sets $21
Traders $29
Utopia $31
Viking Fields of Conqst $37
Visions of Aftermath $12
Warlords $29
Warlords 2 $42
Worlds at War $29



'SIEGE' is a medieval style castle assault game. You are given four castles to attack and deferld in a one castle scenario or an extended campaign. Includes historical troops (French, English, Celtic), mythical troops (Elves, Trolls, Giants), siege towers, battering rams, catapults, and oil **$36**

IBM ADVENTURE

Advnts Willie Beamish $34
Advnts Willie Beamish 2 $39
All Dogs Go to Heaven $17
Altered Destiny $34
B.A.T. $19
BAT 2: Koshan Conspy $32
Castle of Dr Brain $34
Chmbr Sci Mutnt Prstss $25
Code Name: Iceman $21
CodeName : Iceman 2 $39
Colonel Bequest $21
Colonel Bequest 2 $34
Conquests of Camelot $21
Conquests of Longbow $34
Conspiracy Deadlock $34
Countdown $37
Covert Action $29
Cnme Does Not Pay $29
Cnme Wave $37
Cruise for a Corpse $34
Dark Heart of Uukrul $34
David Wolf.Scrt Agnt $15
Deja Vu 2 Lost in LV $12
Die Hard $28
Don't Go Alone $ 9
Duck Tales $15
Earthnse $12
East v West:Berlin '48 $ 9
Eco Quest 1 $34
Felony $12
Free DC $29
Future Wars $28
Galleons of Glory $29
Gamma Force $ 9
Gateway $36
Geisha $32
Godfather $32
Gold Rush $15
Grail Quest $27
Hare Raising Havoc $32
Harley Davidson $12

Light Quest $32
Loom $19
Lost in LA $37
Lost Treasures Infocom $42
Magnetic Scrolls Bridl $34
Manhunter NY $28
Manhunter SF $15
Maniac Mansion $18
Martian Memorandum $37
Mean Streets $37
Mixed Up Mthr Goose $29
Mixed Up Fairy Tales $29
Murder by the Dozen $15
Murder Club $28
Murders in Space $12
Oregon Trail $28
Out of this World $36
Plan 9 from Outer Space $31
Police Quest 1 $34
Police Quest 2 or 3 $34
Prince of Persia $25
Rex Nebular Cos Gen B $39
Rise of the Dragon EGA $29
Rise of the Dragon $34
Rocketeer $32
Search for the King $24
Secrt Monky Islrd 1 $23
Secrt Monky Islnd 2 $39
Sex Olympics $24
Sex Vixens from Space $12
Sierra Adventure Burldle $39
Shogun $12
Sinbad $12
Snoopy $ 9
Space Quest 1 $34
Space Quest 2 $28
Space Quest 3 or 4 $34
Space Quest 4 CD $36
Space Quest 5 $39
Space Quest Burldle $39
Spellcasting 101 $19
Spellcasting 201 $36

'BRAVO ROMEO DELTA' gives you the role of Chief Target Planner at the Strategic Air Command. It is your duty to launch a limited nuclear strike against the forces of the Soviet Union in order to gain a military advantage without precipitating a full scale war. Features ability to play either side. **$34**

Heart of China $34
Hostage $ 9
Hound of Shadow $17
Indy Jones L Crsd ega $21
Indy Jones L Crsd vga $27
Indy Jones Fate Atlantis $39
Jack the Ripper $39
James Bond Stealth Aff $34
King's Quest 1 Enhncd $34
King's Quest 2 or 3 $28
King's Quest 4 $34

IBM ADVENTURE

King's Quest 5 ega $34
King's Quest 5 vga $39
King's Quest 5 WIN $39
King's Quest 6 vga $39
Kristal $15
Lane Mastodon $12
Leather Goddesses 2 $42
Leisure Suit Lrry 1 vga $34
Leisure Suit Lrry 2, 3or5 $34
Leisure Suit Lrry Bundle $39

Spirit of Excalibur CD $39
Startrek 5 $12
Startrek 25th Anniversry $36
Time Quest $19
Train $ 6
Uninvited $ 9
Universe 1 -3 Ea $34
War in Middle Earth $15
Where Amrcas Pst CSD $37
Where Europe CSD $30
Where USA CSD $30

IBM ADVENTURE

Where World CSD $27
Wher Wrld CSD Dlx CD $64
Where Time CSD $30
Wierd Dreams $12
Wonderland $19
Zak McKracken w/HB $18
Zeliards $21
Zombie $12

IBM TRADITIONAL

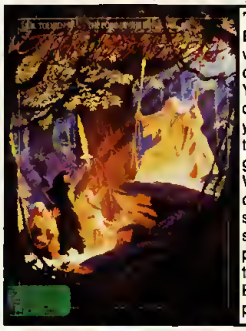
3D Pool $12
3 in 1 Players Pack $37
Acquire $15
Amarillo Slim Poker $12
Backgammon WIN $19
Battle Chess 1 $29
Battle Chess 2 $29
Battle Chess WIN $29
Battle Chss Dos/Win CD $44
Blackjack DOS/WIN $19
Bridge 7 $31
Capstone CD Collection $45
Casinos of the World $29
Centerfold Squares $21
Check Mate DOS/WIN $36
Chessmaster 3000 $32
Chessmaster 3000 WIN $36
Chess Net $34
Chess X Collossus $19
Clue Master Detective $15
Cribbage King/Gin King $19
Crossword Magic $32
Dealers Choice Poker $32
Dr Thorp's Blackjack $32
Ewd O'Thorpe Blackjack $19
Electnc Jigsaw $12
Faces. Tetris 3 $25
Femmes Fatale $26
Femme Fatale DD 1-3 $18
Games People Play $27
GO Master 5 Dlx $109

'OMAR SHARIF ONBRIDGE' is the first talking bridge game that uses full VGA graphics. Set up your own hands to practice slams, no trump hands, or defensive play. Features digitized speech, 1-4 players, reveal any or all hands at any time, printer control to print out hands, & novice mode for beginners. **$37**

GO Master 5 Dlx WIN $109
GO Joseki Genius $39
GO Junior $19
GO Master 5 DOS/WIN $39
GO Scribbler $34
GO Tactical Wizard $39
Grarld Slam Bridge $22
Home Casino Spectaclr $15
Hong Kong Mah Jong $32
Hoyle's Games 1 or 2 $21
Hoyle's Games 3 $29
Hoyle's Games 4 $29
Ishido $34
Jeopardy 1 or 2 $10
Jigsaw Pinups $24
Jones in the Fast Lane $24
Living Jigsaws $12
Lexicross $24
Monopoly $24
Omar Sharif on Bridge $37
Penthouse Jigsaw $24
Pictionary $24
Pinball WIN $29
Planet of Lust $24
Price is Right $15
Prime Time Hits 1 or 2 $25
Rack'em $12
Risk $24
Risk WIN $29
Sargon 4 or 5 $34
Scrabble $24
Scrabble Deluxe $34
Shanghai 2 $24
Shogi Master $34
Solitaire Royale $19
Solitaires Journey $36
Sorry $15
Spot $15
Stratego $31
Strip Poker 3 $31
Strip Poker Data 1-5 Ea $19

IBM TRADITIONAL

Super Jeopardy $27
Super Tetris $32
Tetris $24
Trivial Pursuit $26
Trump Castle 2 $29
Vegas Entrtmnt Pk WIN $20
Video Poker by Masque $19
Video Poker DOS/WIN $34
Welltris $24
Wheel of Fortune 1-3 Ea $10



'THE TWO TOWERS' is the secorld volume in the Lord of the Rings saga. You control a party of characters as you battle orcs, trolls, wargs, arld ghosts. Features VGA graphics, a complete musical score & digitized speech, automapping, & mouse interface. Free Clue Book while supplies last. **$37**

Wheel of Fortune Gold $15
Wordtris $29
Wrld Chmp Backgamn $24
Wrld Chmp Cnbbage $24

IBM SPORTS

4D Boxing $17
4th & Inches $ 9
ABC Boxing $32
ABC Mon Night $34
All American College Fb $36
All Star Sports Pak $34
APBA Baseball $28

APBA Encyclopedia $34
APBA General Manager $29
APBA Micro Manager $32
APBA Stat Master $29
APBA Wizard $29
APBA 1908 - 91 Ea $21
APBA Basketball $28
APBA Bowling $19
APBA Football $49
Basketball Challenge $28
B ball Ch 1987 - 88 Ea $13
B ball Ch 1989 - 90 Ea $17

Bo Jackson Baseball $32
Cycles Grand Prix $28
Daily Double Horse $19
Days of Thunder $24
Dirk's Baseball Encyclpd $19
Fast Break $ 9
Games Winter Chllng $34
GFL Champ Football $ 9
Grarld Prix Circuit $17
Greens $34
Gretsky Hockey 2 $34

IBM SPORTS

Gretsky League $26
Hardball 2 $28
Hardball 3 $34
Hole in One Mini Golf $12
Hole in One Course Disk $ 9
Indianapolis 500 $17
International Sports Ch $29
J Conners Pro Tennis $32
Joe Montana Football $31
John Elway's QB $ 6

Lakers v Celtics $19
LH 3 in 1 Football $30
LH Boxing $30
LH College Basketball $30
LH Full Count Baseball $30
LH Hockey $30
LH Pro Basketball $30
LH Team Disks $15
LH League Leaders $15
LH Utility Disks $15
Links Golf $37
Links Golf WIN $39
Links Course 1 -6 Ea $17
Links 386 Pro $42
Links 386 Course Disks $20
Low Blow $12
Madden Football $21
Madden TD 89 & 90 $18
Madden Football 2 $32
Magic Johnson Fst Brk $ 6
Mario Andretti Racing $17
ML Basbll Mngr's Chllng $19
ML World Series Disks $17
ML TD 1982 - 1990 Ea $17
ML All Stars $17
ML Franchise Disks Ea $20
ML Basketball $28
ML Personal Pro Golf $28
ML Football Deluxe $39
Michael Jordan Flt Sim $44
Mike Ditka Football $32
Mini Putt $ 9
NASCAR Challenge $31
NFL Challenge $60
NFL 1984 - 1987 Ea $15
NFL 1988 - 1991 Ea $22
NFL Preseason Disk $22
NFL All Star Teams $22
NFL College Alumni $22
NFL College Teams $19
NFL Dream Teams $20
NFL Greatest Teams $22

The **'THUNDER BOARD'** is a sourld board that is 100% compatible with Sourldblaster and Adlib. It reproduces digitized sounds using an 8 bit DAC. Features include dynamic filtering, 11 Voice FM music synthesizer, sampling rate up to 22 KHz, microphone input, joystick port, & 2 watt power amp **$84**

NFL Roster Editor $20
NFL Situation Editor $20
NFL Football $31
NFLP roleague Football $24
Nicklaus Signature Edit $39
Nicklaus SE Clip Art $24
Nicklaus Greatest 18 $27
Nicklaus Unlimited Golf $27
NG Clip Art $17
NG Course 2, 3, 4, or 5 $15
Over the Net Volleyball $24

IBM AMIGA MACINTOSH GAMES AND HINT BOOKS FOR LESS

IBM SPORTS

Pete Rose Baseball	$ 9
PGA Tour Golf	$32
PGA Tour Golf WIN	$38
PGA Tour Golf Disk 1	$17
PGA Tour Golf Ltd Edt	$45
Playmaker Football	$29
Pro Football Analyst	$29
Road to the Final Four	$37
Reel Fish'n	$12
Serve & Volley	$12
Skate or Die	$15
Ski or Die	$16
Sport of Kings	$15
Summer Challenge	$34
Super Car Pack	$37
Team Suzuki	$15
Tennis Cup	$32
Tie Break Tennis	$19
TKO Boxing	$ 6
Tom Landry Football	$29
Tony LaRussa Basebll	$29
T LaR Fantasy Managr	$15
T LaRussa Stadiums	$15
T LaR Teams1901-68	$15
Weaver Baseball 2.0	$32
Weaver 1988 - 1989 Ea	$16
Weaver Commisnr 2.0	$21
Weaver 2.0 1990 Teams	$16
Weaver 2.0 Comm Edt	$56
Wond Circuit	$34
Wond Class Soccer	$28

HINT BOOKS

Advnturs Willy Beamish	$10
Altered Destiny	$10
A Train	$16
Bard's Tale 1 - 3 Ea	$10
Buck Rogers 1 or 2	$10
Castle of Dr Brain	$10
Champions of Krynn	$10
Civilization	$16
Code Name Iceman	$10
Colonel Bequest 1 or 2	$10
Conquests of Camelot	$10
Conquests of Longbow	$10
Curse of Azure Bonds	$10
Death Knights of Krynn	$10
Dragon Wars	$10
Drakkhen	$10
Dynamix Great War Pln	$16
Elvira 1 or 2	$10
Eye of Beholder 1	$10
Eye of Beholder 2	$12
Fountain of Dreams	$10
Free DC	$10
Gateway Savage Frntr	$10
Hard Nova	$10
Harpoon Battlebook	$16
Heart of China	$10
Hero's Quest 1 - 3 Ea	$10
Immortal	$10
Indy Jones Lst Crsade	$10
Indy Jones Fate Atlants	$10
Jetfighter 2.0	$16

HINT BOOKS

King's Quest 1 - 5 Ea	$10
Leisr Suit Larry 1 - 5 Ea	$10
Lemmings w/Disk	$21
Loom	$10
Lord of the Rings 1 or 2	$10
Lost in LA	$10
LucasArts Adventure	$16
Magic Candle 1 or 2	$10
Manhunter NY or SF	$10
Maniac Mansion	$10
Martian Dreams	$13
Matrix Cubed	$10
Might & Magic 1 or 2	$10
Might & Magic 3 or 4	$16
Planet's Edge	$16
Police Quest 1 - 3 Ea	$10
Pool of Darkness	$12
Pool of Radiance	$10
Populous 1&2 Offict Str	$16
Power Monger	$10
Power Mngr Strategy Bk	$16
Quest for Clues 2, 3or4	$21
Quest for Glory 1-3 Ea	$10
Railroad Tycoon	$10
Rise of the Dragon	$10
Run 5 Issue 1 - 20 Ea	$ 6
Savage Empire	$10
Secret Mnky Islnd 1or 2	$10
Secret of Silver Blades	$10
Shadow Sorcerer	$10
Simcity/Simearth	$20
Space Quest 1 - 4 Ea	$10
Starflight 1 or 2	$10
Star Trek 25th Anniv	$10
Strategy Plus 3 - 11 Ea	$ 8
Strategy Plus 12-19	$ 5
Treasures Savage Fmtr	$10
Tunnels & Trolls	$16
Ultima 4 - 7 Ea	$10
Ultima Avatar Advntures	$14
Ultima 7 & Underwond	$16
V for Victory	$16
Wizardry 6 Cosmic Frg	$12
Wizardry 7 Crusade	$12
Yeager's Air Combat	$16

IBM AD & D

Champions of Krynn	$19
Curse of Azure Bonds	$15
Dark Queen of Krynn	$32
Death Knights of Krynn	$20
Dragon Strike	$12
Dragons of Flame	$ 9
Eye of the Beholder	$32
Eye of the Beholder 2	$38
Gateway Savge Frontr	$32
Heroes of the Lance	$12
Pool of Darkness	$38
Pool of Radiance	$15
Secret of Silver Blades	$15
Shadow Sorcerer	$32
Tales Magic Prophcy S	$38
Treasurs Savage Frontr	$32
War of the Lance	$ 9

IBM ROLE PLAYING

2400 AD	$28
Autoduel	$26
Bad Blood	$31
Bard's Tale 1	$15
Bard's Tale 2	$19
Bard's Tale 3	$31
Bard's Tale Cnstrctn St	$19
Battletech 1	$12
Battletech 2	$31
Blade Warrior	$12
Bloodwych	$15
Buck Rogers 1	$12
Buck Rogers 2	$32
Captain Blood	$ 9
Captive	$30
Celtic Legends	$32
Champions	$37
CHARACTR EDITORS	$16
Conan	$29
Corporation	$29
Cybergenic Ranger	$32
Cyber Space	$29
Darklands	$39
Drakkhen	$37
Dragon Wars	$12
Dusk of the Gods	$36
Elvira 1 Mistress Dark	$34
Elvira 2 Jaws Cerberus	$39
Escape from Hell	$17
Fire King	$19
Flames of Freedom	$28
Fountain of Dreams	$15
Four Crystals of Trazere	$32
Hard Nova	$17
Hero's Quest 1 EGA	$21
Hero's Quest 1, 2 or 3	$34
Hyperspeed	$34
Immortal	$17
Keys to Maramon	$12
King's Bounty	$19
Knights of Legend	$30
Legacy of the Necromncr	$29
Legend	$31
Lord of the Rings 1	$34
Lord of the Rings 2	$37
Loremaster	$39
Lure of the Temptress	$37
Magic Candle 1	$12
Magic Candle 2	$37
Magic Candle 3	$38
Matrix Cubed	$32
Mechwarrior	$34
Megatraveller 1	$16
Megatraveller 2	$19
Megatraveller 3	$39
Midwinter 1	$12
Midwinter 2	$28
Might & Magic 1 or 2	$12
Might & Magic 3	$34
Might & Magic 4	$39
Mission Impossible	$19
Murder	$29
Obitus	$34

IBM RDLE PLAYING

Pirates	$ 9
Pirates Gold	$34
Planet's Edge	$37
Prophecy 1	$12
Questron 2	$12
Rings of Medusa	$24
Sea Rogue	$39
Sentinel Worlds	$15
Sleeping Gods Lie	$29
Sorcerian	$34
Space 1889	$16
Space Inc	$34
Space Rogue	$30
Space Wrecked	$19
Spellbound	$39
Spirit of Excaliber	$19
Starflight 1 or 2	$19
Sword of the Samurai	$ 9
Swrd Samrai & Pirates	$16
Tangled Tales	$21
Tengen Arcade Hits	$25
Terran Envoy	$12
Third Couner	$ 6
Times of Lore	$28
Tunnels & Trolls	$12
Twilight 2000	$34
Ultima Martian Dreams	$37
Ultima Savage Empire	$34
Ultima Trilogy	$35
Ultima Trilogy 2	$45
Ultima 1-6 Bundle CD	$59
Ultima 4 or 5	$35
Ultima 6 False Prophet	$39
Ultima 7 Black Gate	$45
Ultima Stygian Abyss	$48
Uncharted Waters	$42
Vengeance of Excalibur	$19
Windwalker	$28
Wizardry Trilogy	$32
Wizardry 4	$19
Wizardry 5	$32
Wizardry 6 Cosmic Frg	$37
Wizardry 7 Crusaders	$39

IBM ACTION /ARCADE

Airborne Ranger	$12
Amazing Spiderman	$ 9
Arachnaphobia	$28
Artura	$ 6
Back to the Future 2or3	$15
Barbarian	$ 9
Bart Simpsn House Wrd	$31
Battle Master	$37
Battlestorm	$32
Bill & Ted's Excllnt Adv	$19
Blockbuster	$ 6
Blockout	$28
Brain Blaster	$28
Colorado	$ 6
Continuum	$29
Cool Croc Twins	$24
Crackdown	$17
Dark Century	$27
Day of the Viper	$19

IBM ACTION /ARCADE

D Generation	$32
Dig Dug	$ 6
Dr Doom's Revenge	$ 9
Dragon's Lair 1	$24
Dragon's Lair 2	$34
Drgn's Lair Singe Cstl	$34
Freakn Funky Fuzzballs	$19
Galaxian	$ 6
Gauntlet 1 or 2	$ 9
Gold of the Aztecs	$29
Grave Yardage	$12
Gremlins 2	$ 9
Guy Spy	$29
Hard Driving 2	$38
Hare Raising Havoc	$32
Home Alone	$27
Killing Cloud	$19
Knight Force	$29
Lemmings	$32
Lemmings Data Disk	$19
Light Comdor	$29
Light Quest	$32
Loopz	$24
Marble Madness	$15
Monty Python	$15
Ms Pac Man	$ 6
M.U.D.S.	$16
Mystical	$27
Nevermind	$25
Night Breed	$15
Night Shift	$17
Nova 9	$21
Obliterator	$ 6
Oil's Well	$19
Pac Man	$ 9
Pick N Pile	$27
Pipe Dream	$19
Pitfighter	$22
Powerdrift	$25
Powerdrome	$12
Punisher	$ 9
Resolution 101	$12
Roller Babes	$25
Rotox	$24
Savage	$19
Sierra Arcade Bundle	$24
Silpheed	$21
Simpsons Arcade Game	$31
Sliders	$27
Space Ace 1 or 2	$34
Space Wars	$37
Speedball 2	$25
Stellar 7	$21
Stormlord	$ 9
Super Off Road	$15
Super Pac Man	$ 9
Super Space Invaders	$25
Taking of Beverly Hills	$27
Teenage Mtnt Nnja Trtl	$25
TMNT Manhatten Miss	$31
TMNT Arcade	$31
Terminator	$34
Thexder 1 or 2	$21

IBM ACTION /ARCADE

Troika	$19
Vaxine	$24
Viking Child	$32
Volfied	$24
Wild Streets	$31
Wild Wheels	$32
Wrath of the Demon	$29
Xenocide	$19
X Men 1	$ 9
X Men 2	$25

IBM HARDWARE

Ad Lib Sound Card	$59
Ad Lib Gold 1000	$179
Adlib Progmrs Manual	$27
Adlib Surround Sound	$64
Adlib Telephone Module	$64
Ad Lib Visual Composr	$75
Ad Lib Speakers	$15
Flight Stick	$43
Flight Stick w Falcon	$46
Game Card 3	$39
Gravis Ultrasound Board	$149
Champ Joystick	$24
Maxx Control Yoke	$59
Rudder Peddals	$39
Mouse 3 Button	$29
Sound Blaster	$109
Sound Blaster Pro	$189
Snd Blaster Speakers	$15
Snd Blaster Voice Edtr	$54
Sound Star Snd Board	$19
Thrustmaster Joystick	$69
Thrustmstr Pro Joystick	$109
Thrustmstr Weapn Cntrl	$79
Thunder Board SndBrd	$84
Thunder Board Spkrs	$15

IBM SIMULATION

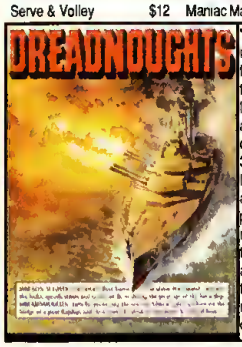
688 Attack Sub	$19
A10 Avenger	$43
A10 Tank Killer 1.5	$34
Abrams Battle Tank	$12
Aces of the Pacific	$42
Aces Pacific Mission 1	$27
Aces Pacific Mission 2	$27
Aces over Europe	$46
Aces Europe Mission 1	$27
Aces Europe Mission 2	$27
Air Force Commander	$37
Air Strike USA	$19
Allied Forces Bundle	$29
Armor Geddon	$29
ATAC	$29
ATP	$37
B17 Flying Fortress	$39
Battle Command	$24
Battlefield 2000	$37
Birds of Prey	$32
Blue Max Aces WW 1	$12
Buzz Aldrin Race Spc	$37
Campaign: Strat Flight Sim	$37
Car and Driver	$39
Cardinal of the Kremlin	$27
Carrier Command	$12
Conqueror Multi Tank	$16
Crash Course	$ 6
Design yr own Railroad	$29
Dynamics Bundle	$39
Elite Plus	$19
Eye of the Storm	$29
F117A Nighthawk	$42
F14 Tomcat	$26
F15 Strike Eagle 2	$19
F15 SE2 Scenario Disk	$17
F15 Strike Eagle 3	$44
F19 Stealth Fighter	$24
F22 ATF	$39
F29 Retaliator	$32
Falcon AT	$37
Falcon 3.0	$45
Falcon 3 Scenario 1	$22
Flight of the Intruder	$22

IBM SIMULATION

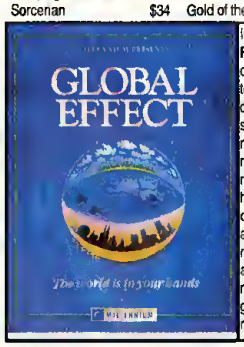
Flight Simulator 4.0	$39
Aircraft Scenry Design	$35
Flight Planner	$24
New Facilities Locator	$27
Sound, Graphics Upgrde	$27
Sublogic Scenery Disks	$22
Fly Grand Canyon 3D	$45
Gunboat	$33
Gunship	$12
Gunship 2000	$39
Harrier Combat Sim	$ 6
Heatwave	$25
Heros of the 357th	$32
Hoverforce	$31
Hunt for Red October	$22
Hyperspeed	$34
Jet Fighter 2.0	$39
Knights of the Sky	$29
Land, Saa & Air Bundle1	$39
Land, Sea & Air Bundle2	$39
LHX Attack Chopper	$26
Life & Death 1 or 2	$24
Lightspeed	$29
M1 Tank Platoon	$34
Mantis Exprmntl Fghtr	$34
Megafortress	$27
Megafrtrss Mission Disk	$27
Megafortress 3D Editor	$27
Miami Enforcer	$39
Mig 29 Fulcrum	$32
Power Boat Simulator	$39
Rapcon	$29
Reach for the Skies	$31
Red Baron	$34
Red Baron Mission 1or2	$24
Red Storm Rising	$12
Road&Track Grand Prix	$37
Sailing Instructor	$199
Sailing Simulator	$39
Sailing Simulator VGA	$42
East Coast Voyages	$34
West Coast Voyages	$34
Scenery Collection A/B	$37
Secret Weapons Lftwff	$44
S Weapons Exp1 P38	$21

IBM SIMULATION

S Weapons Exp2 P80	$21
S Weapons Exp3 He162	$21
S Weapons Exp4 Do335	$21
Shuttle	$34
Silent Service 2	$34
Stormovik	$15
Strike Aces	$19
Strike Commander	$45
Stunt Driver	$15
Tank	$37
Team Yankee	$34
Team Yankee 2	$29
Test Drive 2: Collectron	$34
TD2 Data Disks 1-4 Ea	$15
Test Drive 3	$32
TD3 Road & Car Disk	$19
TFH & BH1942	$44
Thunderhawk	$29
Thunderstrike	$27
Top Gun Danger Zone	$31
Tracon	$34
Tracon 2	$29
Tracon 2 WIN	$34
Ultrabots	$37
Vette	$33
Virtual Reality Studio	$49
Wing Commander 1	$39
WC1 Mission 1 or 2	$19
Wing Com 1 Dlx CD	$45
Wing Commander 2	$45
WC2 Operations Mod 1	$27
WC2 Operations Mod 2	$27
WC2 Speach Pack	$15
Wolfpack	$15
Yeager's Air Combat	$39



'DREADNOUGHTS' is a WWI surface fleet battle simulator. It recreates the look, specificatons, and tactics of fleet combat. Features 3D views, comprehensive manuals and sea charts, a potent English command parser, one or two player mode and computer controlled ships, gunnery and damage control **$42**



In 'GLOBAL EFFECT' you are called upon to protect civilizations on distant planets. In save a world, you must solve environmental problem; in rule a world, you have full military options to use against your opponents, and in create a world, you must build from the ground up. Has modem play. **$32**

'B17 FLYING FORTRESS' is a WWII bomber simulation. Can you lead a 10 man crew to victory against squadrons of Nazi warplanes? Features authentic flight dynamics, customize your plane with historically accurate nose art, & control each crew members position from pilot to bombadier. **$39**

'SECOND CONFLICT' is a game of interstellar strategy and conquest. Test your skill against friends or the computer in one of 6 exciting scenarios or create your own with the built in editor. Choose between warships, stealthships, missiles, & transports in your quest to rule the galaxy. **$34**

'DARKLANDS' draws upon the lore, myths & superstitions of medieval Germany to create a realistic fantasy role-playing game. A new menu system that provides more traditional rpg options than ever before. Characters fight in real time combat to develop skills that allow them to grow and develop. **$39**

'LINKS 386 PRO' offers **Super VGA** graphics and advanced features designed for your 386 or 486. New features include computer opponent, save game option that allows your friends to play against you in an existing game, pre-recorded games from worthy opponents, & many game modes **$42**

'NEMESIS GO VER 5 DELUXE' is the ultimate computer GO program. With the simplicity of checkers and the complexity of chess, GO is a serious strategy game. Includes GO MASTER-a basic GO player and tutor, Joseki Genius adds complex corner openings, Tactical Wizard & Scribbler **$109**

'BATTLE ISLE' is a strategic wargame. Features 1 or 2 player modes with difficulty levels from beginner to expert. You control multi-purpose factones ground troops, airplanes, helicopters, carriers, destroyers, subs, and more. Features over 32 unique maps, & multiple zoom levels **$32**

CHIPS & BITS

PO Box 234
Rochester VT 05767
Fax 802-767-3382
802-767-3033
800-753-4263
GEnie Keyword CHIPS

We accept Visa, MC & Money Orders. COD add $5. Checks Held 4 Weeks. Most items shipped same day. All shipping rates are per order not per item. UPS $4. 2 Day Air $6. Mail $5. Airmail Canada $6: HI, AK, PR, 2 Day Air $12. Airmail Europe $12 first item plus $6 per additional item.

All Sales Final. Check compatibility before you buy. Shipping times not guerenteed. Defective replaced with same product. Price & availability subject to change.

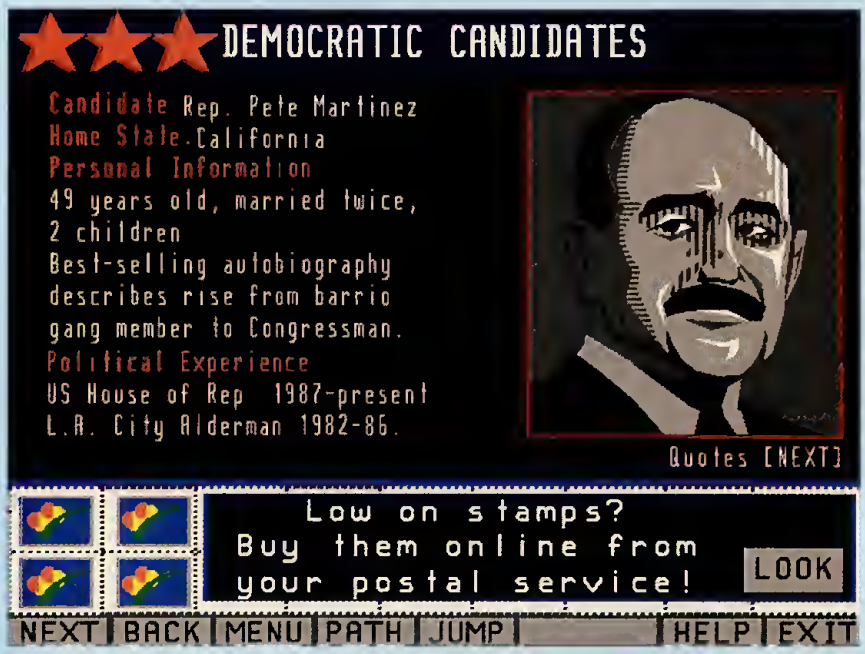
Circle 19 on Reader Service Card.

THE NEXT PRESIDENT

By Gregg Keizer

Thomas Jefferson would have loved this game. The third President was a radical among radicals, a man who once said "a little rebellion now and then is a good thing, and as necessary in the political world as storms in the physical." Unlike some of his contempories, Jefferson believed that citizens were smart enough to make intelligent choices.

The Next President thinks so, too. This innovative on-line game — found only on Prodigy — lets thousands of computer owners participate in a mock presidential campaign. Players cast votes, set candidates' positions, and advise politicos on pop-up crises throughout a months-long process from caucuses and primaries in Iowa and New Hampshire to the Oval Office. The names may be unfamiliar — The Next President doesn't use real candidates — but the result is a stunning adventure that almost anyone will find entrancing.



Candidates in Prodigy's The Next President aren't real, but they have real-world opinions.

Pick Your Political Poison

Eight candidates — four Republican, four Democrat — give you plenty from which to pick. There's an incumbent Vice President, a state governor, several Senators, a businessman, a former general, and an academic among the personalities. Politically correct, The Next President offers both female and minority candidates, unlike the current real-world race.

Each candidate has opinions on eight political issues. Ranging from abortion rights to reducing American military presence in Europe, these issues are crucial to game play, because a candidate's position decides, in large part, the number of votes he or she receives. As campaign manager, you can sway your candidate's stances by recommending changes.

Weekly updates to the world of The Next President come in the form of print and television news you read. And each week another incident appears to which candidates must respond. Like a good soap opera, The Next President's script tosses in juicy gossip, candidate gaffes, and, early on, even an assassination attempt.

Charts and graphs show how candidates fare in elections, and where they and the players stand on the issues. Graphics images are clear and easy to follow, and give the game a pseudoscientific look.

Majority Rules

What really sets this game apart, though, is its multiplayer approach. Rather than wrest control of a party from a computerized competitor, in The Next President you battle it out with hundreds, perhaps thousands, of breathing opponents. This is one of the first on-line "groupware" games that really works.

Majority rules in democracy, and in The Next President, too. In our play during the primary season, candidates typically accepted advice only from the largest block of managers. Ditto for the weekly crisis, as candidates took the advice of the majority on such instant issues as gun control.

States' primaries were even tied to players' responses. Candidates won or lost an election based on how closely their stands matched those of the Prodigy players living in that state.

The Next President crunches the numbers, but Prodigy makes possible the rapid shifts of opinion that are crucial to a realistic American political game. Each week the game recalculates candidate positions, and handles any elections that may have taken

place. Although you can play by connecting just once a week, The Next President is more fun if you spend time reading and sending messages to others. Prodigy has set aside parts of its message area for conversations about The Next President. Glance at some of the messages — there were hundreds by press time — and you'll find managers sticking up for their candidates, calling for on-line debates, and wondering how anyone, *anyone*, could support a candidate other than theirs. All these elements make The Next President as much a social activity as a computer game.

White House or Bust

Although The Next President is played in real time — primaries took place on line on the same days voters went to the polls — you can join in any time. As you read this, though, the primaries are over and the party conventions only weeks away. You may have missed part of the fun, but there's still plenty to come. (Unfortunately, the convention and general-election scenarios hadn't yet been written when this went to press.)

Expect an open-ended convention, at least among the Democrats, because in late April the four were nearly deadlocked in delegates, contrary to the real election. Prodigy promises that players will be able to participate in the convention drama via the bulletin-board message area.

After the conventions, the final ten to 12 weeks will focus on weekly national "town meetings," where questions from players will be integrated into prescripted conversations with the presidential and vice-presidential candidates. And come Election Day, you'll be able to watch the returns and see who wins.

This multiplayer game lets you play a real part in presidential politics, rather than just reading the newspapers, watching television sound bites, and casting a ballot. The Next President is something out of Jefferson's dreams — an electorate educated in the process, enlightened about the choices, and informed on the issues.

And to beat all that, it's more fun than watching Clinton squirm, Bush pontificate, and Perot shout. This is how elections really should be.

Prodigy, 445 Hamilton Ave., White Plains, NY 10601, (800) 776-3449; IBM PC, Tandy, or compatible; 512K RAM; DOS 2.0 or later; Hercules, CGA, EGA, MCGA, Tandy 16-color; requires 1200bps or faster Hayes-compatible modem; mouse optional; $49.95 sign-up kit, $12.95/month flat-fee charge

UNCHARTED WATERS

By Lafe Low

It was a time when the world was flat — when bold explorers packed their ships and set off over the horizon in search of distant lands and rich rewards in spices and gold. Ah, the Age of Discovery.

It's also the time of Koei's Uncharted Waters, a game of trade, discovery, and fame in the world of Magellan, Vasco da Gama, and Christopher Columbus. More a role-playing game than a simulation, this package is nicely endless in scope, but it's missing the action that would keep everybody happy. If your game-playing tastes run more to mayhem and machismo, you should set sail on another silicon ship. But if you can be content with exploration, not exploitation, Uncharted Waters will take you on a grand cruise of the imagination.

Ready All Sails

You sail under the flag of Portugal, that almost-forgotten nation whose navigators rounded Africa and reached India from Europe. Before you set off on your first voyage, though, you must create your character. Actually, it's more like modifying your character, because the process is a role-playing-style distribution of extra points toward traits like courage, judgment, strength, and intelligence.

Experience counts in Uncharted Waters: Each time you sail into port, your sailing experience increases, and, after battles, your war experience jumps. Both earn you more respect from your crew and make it easier for you to recruit new mates. Knowing your limitations during the first few voyages is crucial in Uncharted Waters, lest you attempt too much and watch your crew jump ship, or risk public humiliation when a seasoned mate rejects your recruitment offer.

Other matters you need to tend to in port before casting off include provisioning your ship, buying trade goods, selling cargo for a quick profit, and outfitting your ship(s) with the necessary equipment, such as sextant and telescope. Once you've stashed away some gold, you can also improve your fleet by purchasing new ships or refitting your flagship. You can also hit the pub looking for new recruits, inside information (the bartender is a good source), or even a morale-boosting round of grog for the crew.

Although these at-home activities set the foundation for your voyage, it's the stuff of seafaring — sailing and doing battle on the high seas — that makes Uncharted Waters such a lure for the chair-bound explorer.

Sailing is actually easy. Once you cast off, your flagship appears on a small map of the sea. You control your course by changing direction on a miniature compass rose. Mind the wind and currents, though, because they can either help or hinder you.

It's best to follow the coastline at first. This gives you a feel for the area, and won't put you too far from other ports of call. On your first few voyages, you'll have only your flagship in which to store food. Packed to the gunwales, there's still enough for only a few weeks. Ports appear on the shoreline as icons. Sailing right in and selecting *Disembark* drops anchor.

When another ship appears on screen, move in close and you can bring it to battle. Keep an eye on the time of day — represented by a dial showing the rising and setting of the sun and the moon — since 16th-century naval battles had to be wrapped up by dark.

Getting into perfect position to fire

2 SUPER VALUES FROM ORIGIN™!

ULTIMA® The Second Trilogy

Sold Separately for $189.85 (Suggested Retail)

Now Only $79.95

3 Games in One Package

Three Games from the World's Best-Selling Fantasy and Role-Playing Series!

"With each new sequel, the Ultima series just keeps getting bigger and better!"
– Computer Game Review

- Three games, more than 5.5 megabytes, for long-term play value — you may never see it all.
- Weave magical spells, watch axes and arrows fly, discover cities and towns, converse with merchants and mages.
- Previous Ultima® experience is *NOT* required!

ORIGIN™ We create worlds®

P.O. BOX 161750 • AUSTIN, TX 78716

Wing Commander™ Deluxe Edition

Sold Separately for $129.85 (Suggested Retail)

Now Only $79.95

Includes Wing Commander, The Secret Missions™ and Secret Missions 2: Crusade

The Action/Simulation Series That Defined Cinematic Gaming!

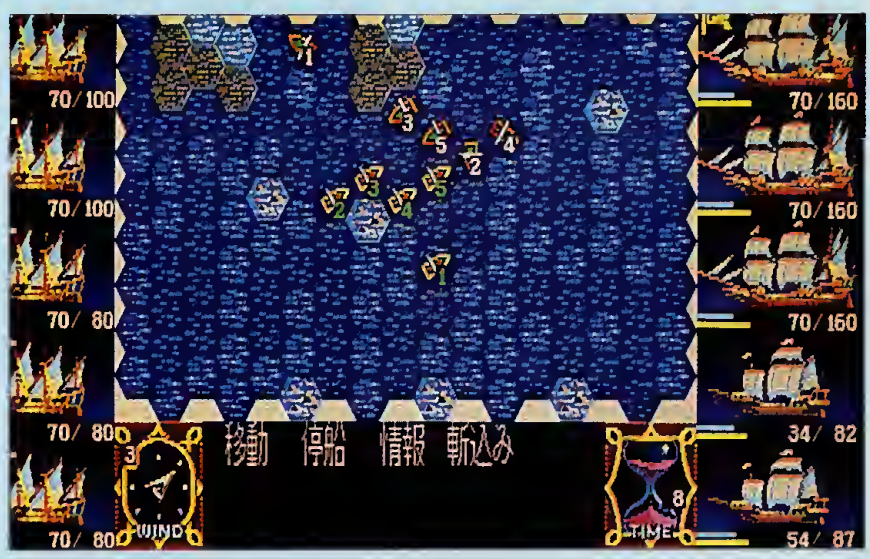
"Wing Commander charts a course toward the interactive video of the future..." – OMNI Magazine

- New wingmen, ships, enemy pilots and mission goals in The Secret Missions disks!
- Dynamic soundtrack alters the tempo and mood to match the action! (Ad Lib®, Sound Blaster™, Roland® MT-32/LAPC-1 or 100% compatible sound board required!
- Cinematic style makes *you* the star in an interactive space epic!
- Mission Selector lets you fly any of the original Wing Commander sorties in any order!

Available at a software retailer near you or call 1-800-999-4939 for MC/VISA orders.

© Copyright 1992 ORIGIN Systems, Inc. Ultima is a registered trademark of Richard Garriott. We Create Worlds is a registered trademark of ORIGIN Systems, Inc. Wing Commander, the distinctive ORIGIN logo and Secret Missions are trademarks of ORIGIN Systems, Inc.

Circle 50 on Reader Service Card.



Combat in Uncharted Waters gives you the admiral's chair.

your cannon is not only difficult, it doesn't even guarantee a perfect hit. Your seamanship's truly tested here. Try to put your ship so that you're upwind of the enemy; if you maneuver well, you'll be able to take on more heavily armed ships. By sailing back and forth across the path of an oncoming galleon, for instance, you'll be able to pepper it with cannon shot until it strikes its colors or sinks.

The battles in Uncharted Waters are strategically engaging, but if you really want to smell the silicon salt and gunpowder, you'll be disappointed. The more-animated battles of Broderbund's Ancient Art of War at Sea or MicroProse's Pirates! will suit you better.

For the Admiral in All of Us

Behind every good captain is a seaworthy first mate. Pay attention when he makes a suggestion, for he always has the good of the ship, crew, and captain in mind. Heed him well and you'll go far.

If you don't feel you've accumulated enough fortune in your seafaring pursuits, you can set sail for lands known to be rich in treasure. Drop anchor at any point and put a party ashore in search of treasure. Unless you're lucky, though, trade is a more lucrative way to expand your bank account. You can also send a party ashore to search for water if you're desperate, but it's usually a safer bet to head for port to restock supplies.

Once your coffers are bursting at the seams with gold doubloons and silver ingots, you'll be able to hire the finest crew and outfit the most seaworthy of ships. When your wealth and status reach a respectable level, you may also win the favor of the king and his blessing on your marriage to his daughter.

With some spare gold, you can invest in foreign ports. Besides earning you the red-carpet treatment every time you return, it'll also help spread the good word for Portugal.

Uncharted Waters is more role play than arcade action. If you have fierce pirate blood flowing hot through your veins, you'll be better served with something like Pirates! But if you long to make your mark on history, open trade routes, and build an unsinkable reputation, you'll revel in navigating the seas of Uncharted Waters. Uncharted Waters is definitely more for aspiring admirals than swashbuckling scurvies.

Koei Corporation, 1350 Bayshore Highway, Suite 540, Burlingame, CA 94010, (415) 348-0500; IBM PC or compatible; 640K RAM; CGA, EGA; supports AdLib; requires two floppy drives or one floppy drive and hard drive; supports keyboard or mouse; no copy protection; $69.95

PC COMIX: LANCE STONE

By Wayne Kawamoto

"Who the hell wants to hear actors talk?" sputtered Harry M. Warner, president of Warner Brothers Pictures in 1927. The focus of his disgust, of course, was the advent of "talkies."

Who wants to hear comic books in 1992? Maybe everybody. Maybe nobody. If the people at PC Comix are right, they may be onto something, perhaps even a multimedia blockbuster. If they're wrong, it'll be a modern-day electronic Edsel. It could go either way.

Lance Stone, the first episode in PC Comix's new interactive series, features nice graphics images, sound effects, limited animation, and, most importantly, decent story lines and characterizations.

PC Comix is gambling that "boys aged 5 to 50" will flock to it in droves. Comic books remain popular, and some old issues command hefty prices. But can this medium, and its excitement, carry over to the computer? Some years ago, Infocom, famous for classic text adventures such as Zork and Hitchhiker's Guide to the Galaxy, pushed the same idea. The results were less than spectacular.

Many popular comic-book characters have made the move to movies, TV, even the computer — Batman, Dick Tracy, and the Rocketeer among others. PC Comix's Lance Stone may well be able to carry a refrigerator with one hand, but can he carry a plot?

Faster than a 9-millisecond hard-disk drive, more powerful than a 50-megahertz 486, Lance Stone is your atypical mild-mannered computer graphics artist (an alter ego for one of the authors?) who lives in a gritty, futuristic city reminiscent of the Los Angeles of the movie *Blade Runner*. Lance has personality. By turns, he's xenophobic, sarcastic, self-righteous, and nerdy. (That last one sounds like a true computer professional.)

At least the authors have a sense of humor. The Woz, a futuristic nightclub, is a nod to Apple founder Steve Wozniak. Billboards promote holographic software of tomorrow, and levitating bar stools can support a drinker too tanked to stand.

The program is both easy to install and to use. Through its HyperComix interface, you "turn" pages to proceed through the story, and track "threads" to see the plot through different viewpoints.

You start out with Lance Stone, but at certain points the program lets you follow another character to view the story through the eyes of the stereotypical (and voluptuous) damsel in distress, or from the perspective of the bad guys. This technique gives the software a chance to further develop the characters — and show ongoing action without the use of that tired old "meanwhile, in another part of the city . . ." plot device. The software's ability to thread or branch a story is interesting, and something paper comic books can't do.

Something else comic books can't do is create smooth dialogue among characters. In print, comic-book characters converse via balloons with stacked levels. In PC Comix, the balloons alternate among characters to show exactly who said what and when.

PC Comix: Lance Stone features Sound Blaster audio effects and music to enhance the story. When Lance enters the nightclub Woz, you'll hear the thumpa-thumpa disco beat. When the bad guy gets his comeuppance, you hear him scream in anguish.

Surprisingly, the sound effects are sparse. When used, they're appropriate, but often you hear only the sound of silence when you expect an effect. In one notable instance, Lance gets into a knock-down bar fight, where, in true Batman style, the *Thumps* and *Bops* on the bad guy are flashed on screen in a blow-by-blow commentary. But the PC is strangely quiet. Where are the hits and groans? Where's the delightful crash of furniture or the smash of glass?

Circle 90 on Reader Service Card.

Mild-mannered Lance Stone stands for truth, justice, and the interactive way.

The graphics images, though, are first-rate. Characters are detailed and colorfully rendered. Interestingly, the backgrounds haven't received the same attention to detail, although this could have been a conscious effort to make the characters stand out.

Some comic frames feature limited animation — blinking lights mostly, with some still figures floating across the screen. The game's designers showed restraint with the animation, keeping the medium closer to a comic book than a cartoon. It would have been easy to try to animate everything on screen.

Short and Sweet

PC Comix: Lance Stone suffers from a certain lack of control. When you want to escape a story branch, you can go only to the beginning or end of that branch. And there's no way to skip frames you've already seen without sitting through all the dialogue and animation again. It's one aspect that's frustrating.

But its biggest drawback is that the story is too short. Even after following all characters' viewpoints, PC Comix: Lance Stone holds only about 45 minutes of material. The story ends in an abrupt cliff-hanger, and, as you've probably guessed already, PC Comix promises future installments to continue the series.

But electronic gamers are accustomed to comprehensive virtual worlds that keep them busy for days or even months. Lance Stone may cost less than a full-blown role-playing or adventure game, but for many, it simply doesn't last long enough.

Has PC Comix hit upon a new multimedia phenomenon? The software tells a story and features nice graphics images and sound, but may not offer enough meat for the money. Do people really want to read comic books on their computers? We'll wait and see whether Lance flies. After all, have you read any good software lately?

PC Comix, Inc., 400 Williamson Way, Ashland, OR 97520, (503) 488-3727; IBM PC, Tandy, or compatible; 640K RAM; VGA; supports Sound Blaster; requires hard-disk drive; no copy protection; $20

NFL PRO LEAGUE FOOTBALL

ALL-AMERICAN COLLEGE FOOTBALL

By Wayne Kawamoto

Shall I compare thee to an autumn day? Thou art brutal, fierce, and merciless. Thou art a football fan.

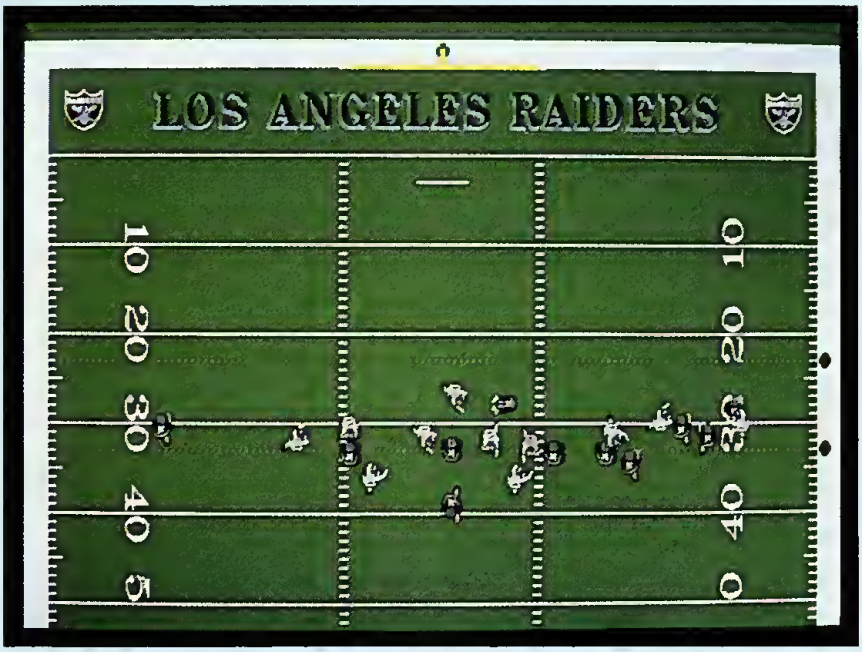
Hey, this ain't no Shakespeare, pal. It's fall. Time to get ready for the season's weekend rituals, and keep those Monday nights open, too.

Rather than switch on the TV, try the PC instead. Your computer can capture the spirit, action, and strategy of football, if you just give it the right fodder. Two prime entrants huddled amidst a league of games are Micro Sports' NFL Pro League Football and All-American College Football.

The emphasis is on statistics, with a side trip into coaching one of your favorite NFL or NCAA teams. Considering some 140 statistical categories, this pair of games takes everything into account, including the weather. Although the graphics and action are coarse, they're fun and exciting.

Both NFL Pro League Football and All-American College Football offer two ways to play. In league mode, players — up to 27 in the NFL version or 60 in the college game — coach their teams through a football season. In head-to-head mode, you call the individual plays in a game against another player (in person or via modem), or against the machine. NFL and College Football share the same game engine and identical play mechanics, but sport different teams.

During league play, each manager formulates coaching strategies and submits them in game-plan form. You key plans into the computer, which uses individual strategies and player statistics to run through games and determine outcomes.



Strategy, not arcade action, makes the difference in NFL Pro League Football.

Game plans, like the real things, must be detailed. For example, you set the ratio of running versus passing plays, assign offensive players to key on, and indicate defense alignments.

A league director takes these game plans and enters the information into the program. Because coaches don't need to be present when games are played, groups of aspiring pigskin mentors can play long distance. They can live in the same city, or spread across the country. It makes it easy to squeeze in a season even when everyone's time is pressed.

Head-to-head mode plays differently. You call each play in a game against a friend or the computer. Both NFL Pro League Football and All-American College Football provide play cards outlining 99 offensive and 88 defensive plays. Simply call the play, and the computer determines the outcome, re-enacting it on a field. The players are shown from a top-down view and move in a manner reminiscent of those little plastic men on shaking electric football games.

Overhead graphics images are crude compared with those of other football games, namely Mike Ditka Ultimate Football. Fortunately, this doesn't detract from a solid game. It's still exciting to call the shots and watch the outcome. Another flaw is the lack of a team and playbook editor, something almost expected now in a PC football game.

NFL Pro League Football and All-American College Football each feature an optional *General Manager* module to view scouting reports on league teams and to schedule seasons. You also can print game plans and additional playbook sheets for distribution to the league's coaches. The *Stats Keeper* maintains 200 categories of season statistics on players and teams in your leagues.

With the NFL version you can play head to head via modem with the *USA Today* Sports Center, and even download weekly NFL player stats. But although the programs are easy to install and play, both need more detailed manuals. Game-play instructions are adequate, but the docs gloss over several key areas.

NFL Pro League Football and All-American College Football are designed for the football purist — the player who wants a solid statistical football simulation without arcade action and flashy graphics.

Despite lack of a team and playbook editor, both are great games, as long as you keep the caveat above in mind. If you're into stats, and you don't need or want the latest in graphics and animation, NFL Pro League Football and All-American College Football make the play.

Micro Sports, P.O. Box 1178, Hixson, Tennessee 37343, (615) 843-3040; IBM PC, Tandy, or compatible; 640K RAM; EGA, VGA; requires hard-disk drive; printer and modem optional; no copy protection; $79.95 NFL, $59.95 All-American

MIG-29 FULCRUM

By Bernie Yee

The former Soviet Union may be a shambles now, but it's not as if all it's ever done is buy McDonald's hamburgers and barter personal possessions in the world's biggest flea market. The country has technological expertise in everything from space flight to robotics.

And don't forget jets. The Mikoyan and Guryevich Design Bureau (a.k.a. MiG) has spent decades keeping its capitalist counterparts busy matching the capabilities of some of the world's best fighter aircraft. MiG-29 Fulcrum, a recent import from Europe, simulates one of the used-to-be U.S.S.R.'s most advanced fighter bombers.

MiG-29 is a solid, interesting flight simulator with a sense of style and graphics most reminiscent of the domestic Chuck Yeager's Air Combat. It's easy to learn and play, so much so that you'll be off the ground and into combat faster than with most other simulations.

MiG aircraft have often exemplified a different design philosophy from their Western counterparts. Where the F-16, for example, is a fly-by-wire (computer-assisted) fighter, the MiG-29 isn't. You, as pilot, have full control over the aircraft, which means you can push the physical limits of the MiG-29 past the failure threshold. This comes in handy when a bandit is on your tail, but it also means you must

A simplified cockpit display makes MiG-29 Fulcrum quite playable.

have an intimate familiarity with the limits of the machine.

And what limits. The MiG-29 is faster than the F-16 at high altitudes and can fly at a 25-degree angle of attack without stalling. The manual teaches you how to do a tailslide, a maneuver for which the Fulcrum is famous: You put your plane's nose up 80 degrees from the horizon (almost straight up, like a rocket), stop, then let the jet slide backward. Your nose flips down and you pick up speed. Apply full power and then level out.

Like the recent Falcon 3.0 simulation from Spectrum HoloByte, MiG-29 Fulcrum sports different flight models. The most advanced requires a fast computer, but an optimum system doesn't demand a math coprocessor — unlike Falcon. Animation and graphics are fluid and smooth, although actual detailing and sound effects are only average.

But the best part of MiG-29 is its easy-to-learn mechanics. After a brush with Falcon 3.0 and its various bug patches, rookie pilots may have second thoughts about ever flying again. Fulcrum's engine is designed to be playable. Its HUD (heads-up display) and various cockpit displays are simple to read and, more importantly, simple to use during combat.

You see a target-designator line (showing the direction of the enemy) and a target-designator box, just as in Falcon 3.0, which flashes red when you lock on missiles. Select a target by pressing the enter key, which cycles the box around your various targets.

Still, MiG-29 omits a number of important features, such as autopilot landing, ejection, and time acceleration when covering vast distances. This simplicity means MiG-29 loses some flexibility. Your weapons load, including rockets and various types of Soviet-made missiles (which perform like the AIM-9 Sidewinders that jet-simulation fans have come to depend on) and are preset for each mission. And though you do have external views, they're not nearly as extensive and complex as Falcon 3.0's. Nor is there a VCR feature.

MiG-29's documentation outlines your five combat missions, but the software doesn't include a campaign builder. That's the price you pay for a game that doesn't demand 10 megabytes of disk space.

Combat missions are challenging and become harder as you progress. You'll mix it up with the Chinese and, of course, fly in a showdown between the MiG-29 and the F-16. Overall, the documentation is a bit disappointing. Its typeface is dark gray on light gray, and is so hard to read you can't help but suspect it's some form of copy protection.

MiG-29 Fulcrum puts you in a cockpit of a bird with different colors, literally. Best of all, MiG-29 reminds us that you don't have to spend years of programming time and suffer interminable delays to put out a solid flight simulator.

Then again, if Spectrum HoloByte could only make a MiG-29 part of its *Electronic Battlefield* series, we could all fly head-to-head modem combat against an F-16. That's as close to the real thing as anyone — even the revanchist diehards in the Russian Republic — can sanely hope for.

Domark, 550 South Winchester Blvd., Suite 200, CA 95128, (800) 245-7744; IBM PC, Tandy, or compatible; 10MHz or faster recommended; 640K RAM; CGA, EGA, VGA, Tandy 16-color; supports AdLib; $49.95

MATRIX CUBED

By Peter Olafson

Sometimes you *can* go home again. At least when you play computer games. Opening the box of a new installment of an established role-playing series always feels a bit like returning to the old neighborhood.

That can be difficult to remember these days, when some developers change game systems the way you and I change oil, but it's one reason role-playing games are regarded with such affection. The game needn't ever end.

SSI's celebrated Gold Box line is a good example. Its editions may have gotten bigger and better during the last four years, but the core has remained pleasantly familiar.

An advantage, naturally, is that fans of the games know exactly what to expect, and can get right in step without the learning curve that accompanies a new system. This is certainly the case when you travel back to the future in Matrix Cubed, the second episode in the Buck Rogers series.

Buck, as commander of special ops, has ordered your six-person party to look after the coronation of a Sun King on Mercury. Along the way, you'll stumble across evidence of a powerful device, and head out across the solar system in search of scientists to build it. That quest leads to confrontations with those emissaries of nastiness from RAM, plus a new crew called PURGE and more than a few other nicely drawn baddies, and eventually a trip to giant Jupiter and its intriguing race of Stormriders.

Much of Matrix Cubed will feel like the old neighborhood to those who've played the first episode, Countdown to Doomsday, except that there's much more of it. Matrix is huge. The perspective remains three-dimensional for indoor movement, overhead when out of doors, and a bank-robbery camera angle for combat. VGA graphics images are crisp and attractive, and the sounds are measured and distinct. Indeed, it's one of SSI's best-looking games yet.

You can bring over your old pals from Countdown, complete with their repertoire of advanced weaponry. The skill-development system remains and continues to lend a nice sense of depth to the characters. (They still seem a bit like sets of stats, but now they're larger sets of stats.)

Familiarity Breeds Contempt

I've always loathed reviews that say, "If you liked that, you'll like this too," but here it seems particularly apt. I'd be a liar if I said I didn't enjoy Matrix Cubed: there are lots of places to go, people to burn down — I mean *meet* — and a planet to save.

And yet, although it's a pleasant enough game, it isn't a great one. One disadvantage of familiarity is that you get used to doing things that really should rub your smart suit the wrong way. There's still plenty of room here for refinement.

While experience points are doled out for non-combat events, combat still rules in Matrix. That's more-or-less traditional for SSI's Gold Box games, and if you don't mind a heavy dose of tactical war game mixed with your role play, it'll be just fine. If you enjoy unraveling clever puzzles, Matrix Cubed isn't for you.

The mouse makes inventory management smooth, but there has to be a simpler way to toggle through your party's inventory than plunging in and out of each character's status screen. The copy protection requires a word from the *Log Book* — a collection of off-line paragraphs that enhance the game's flavor. It asks for this every time you load a saved game; even when it's restoring from within the program after you've been killed off. This puts you in a position to read these bits prematurely, and it spoils the very atmosphere they generate. There's no good reason for this — the game comes with a separate rules manual, so why not use it?

TACKLE THE BEST

Computer Football like you've never seen it!

Explore the exciting and physical world of professional football at its finest. Turn on the heat with an offensive attack that showcases your best personnel, then dare your opponent to get through a defense that blitzes and stunts at every opportunity. Play up to fourteen games at the same time as you coach your team to the Super Bowl!

AN ALL NEW CHALLENGE

The PREMIUM EDITION includes:
- All 28 NFL teams
- Sophisticated Offensive and Defensive playbooks
- Best simulation model available - includes the Run & Shoot!
- External Stats Compiler and full League Support
- Digitized Sound Effects
- Choice of Human or Computer opponent
- Weather conditions, multiple game injuries, and much more!

NFL Challenge™ PREMIUM EDITION sets the standard all computer football games are measured against! TAKE THE CHALLENGE ... Grab your playbook and HIT THE FIELD!

HOW TO ORDER:
Available wherever great computer games are sold, or call: 1-800-635-2425
Mon-Fri, 9am-4:30pm CST - with VISA/MC/AMEX
Requires VGA graphics, 640K and a Hard Drive
Apple Macintosh version available soon.

NFL™

© 1992 XOR CORPORATION ALL RIGHTS RESERVED

Circle 57 on Reader Service Card.

Although it's no great shakes graphically, Matrix Cubed sports great characters.

The generous ten saved-game positions are still indicated only by a single letter. It's also still a system-driven game: Commands are always at the screen bottom; screen partitions are practically chiseled in stone. That doesn't exactly lend itself to generating ambience. Perhaps RPG designers should start at the end and work backward; that way the end would have all the panache you've worked to reach, and the beginning would be more properly mundane. I didn't finish the game (not nearly), but the end is rather routine: a ya-done-good message from Buck and the appearance of the DOS prompt.

That's a rather poor reward for saving the solar system yet again. It's rather like being hustled out of a dinner party after midnight by an exhausted host. There's pleasure in familiarity, but even a good friend can overstay his welcome.

Strategic Simulations, Inc., 675 Almanor Ave., Suite 201, Sunnyvale, CA 94806-2901, (408) 737-6800; IBM PC, Tandy, or compatible; 640K RAM (560K RAM free minimum); EGA, VGA, Tandy 16-color; supports AdLib, Sound Blaster, Roland; requires hard-disk drive; off-disk copy protection; $49.95

HOYLE OFFICIAL BOOK OF GAMES: VOLUME 3

By Eric Grevstad

Depending on your taste in games, you could feel about the third volume in Sierra On-Line's Hoyle Official Book of Games series the same way the person in the Kellogg's Corn Flakes commercial feels about the cereal: "These will never sell. They're too plain, too boring. . . . Hmmm, these aren't so bad, are they?"

While its predecessors challenged you to card and solitaire games, Hoyle 3 offers a six-pack of classic board games you can play against friends or against the computer. All are reasonably pleasant pastimes, but if you want fast-paced action for your $49.95, your reaction more likely may be like the cereal commercial in reverse: "Hey, these look good, nice animation and graphics. Hmmm, there's not much to them, is there?"

Although Hoyle 3 includes 16-color EGA disks, it really requires 256-color VGA and a mouse. (It's barely possible, but purgatory, to crawl through the games using the keyboard.) Pointing and dragging with the mouse is a comfortable way to move backgammon or Pachisi pieces, although Hoyle demands more precise mousework than a relatively forgiving game such as Windows Solitaire. Pieces are small, and if you click a centimeter off target you're chided for an invalid move and must wait while your token is dragged back to its starting space.

The Hoyle 3 lineup starts with Snakes and Ladders, a toddler-aged game that depicts its two to four players as little kids, then adds five more games for older children and grown-ups. Of those, checkers, backgammon, and dominoes are tests for two players, while up to four can play Pachisi and the poker dice game called Yacht.

The games' setup screens let you specify names for human players and choose computerized opponents from 18 animated head-and-shoulders-shot characters from other Sierra games. Unless you're a hard-core Sierra customer, you won't know all the faces on the "good guys" and "bad guys" rosters, but at least you'll never lack for a playing partner.

Poor Sports

Heroes and heroines include Princess Rosella and King Graham from the King's Quest series, Police Quest cop Sonny Bonds, lovebirds Leisure Suit Larry and Passionate Patti (spelled "Patty" here, a typo almost as bad as Larry's backgammon remark "Hey, you're men aren't in the right place"), and the hapless Jones of Jones in the Fast Lane. The villains range from the burly Sheriff of Nottingham and Space Quest nemesis Sludge Vohaul to the witchy Baba Yaga and the tyrannical Mr. Big.

Clicking on a character's name reveals his or her rating (beginner, average, or expert) for the game you've picked. The higher-ranked players are harder to beat than the beginners, for reasons that range from their playing speed — experts

think longer between moves — to what suspiciously seems like loaded dice. During play, characters change expressions and make comments in talk balloons; although the bad guys don't cheat, they're less polite in conversation. When Mother Goose makes it to your side of the checkerboard, she exclaims, "Oh, goody! I'm a king!" By contrast, the evil Mordack sneers, "I look handsome in a crown, do I not?"

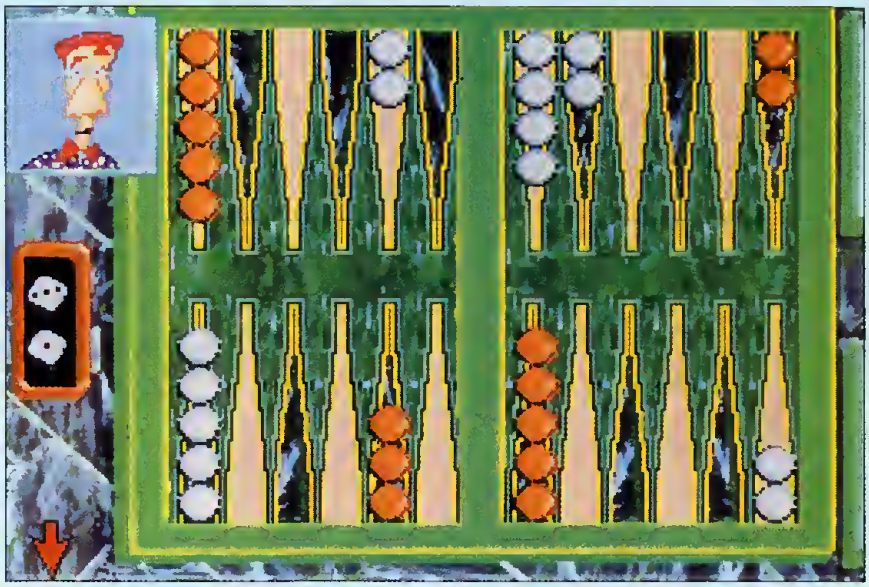
One thing may annoy parents who hope to teach their children good sportsmanship: When you score against them, the Sierra characters frown and wince. (Laura Bow, for instance, makes an adorable little pout when she has to take extra dominoes.) But when the game turns their way, even the nice characters grin and laugh heartily at your misfortune. Seeing Sonny Bonds chuckle and wiggle his eyebrows at me made me feel like assaulting a police officer.

Fruit or Fiber?

Except for their sometimes fussy mouse control, the games are uniformly well executed, with handsome playing boards for checkers, backgammon, and Pachisi; copious music and sound effects (sprightly with a sound card, dreary with your PC's speaker); and a few clever extras.

If you don't like the standard checkerboard, you can play in a lily pond with animated frogs that leap over each other and splash into the water. Kids can click on a spinner, then follow a star to the proper square in Snakes and Ladders, animatedly ascending the ladders and sliding down when they land on a snake. Game options, such as doubling the stakes for confident backgammon players, add finesse.

On the down side, the documentation is a little skimpy. It explains program functions, but kids who don't know how to play the board games will have to be content with reading the terse rule summaries offered on screen, not in print. The Sierra characters' repartée is limited and repetitive — after the first few minutes of play, reading the same five or six snappy sayings grows tiresome.



Jones is one of the 18 animated characters waiting to challenge you in Hoyle 3.

And several of the games seem to drag on for a long time, just as the real board games can. Expert-level checkers opponents take minutes to make their moves, Pachisi plods on with minimal interest, and all but the most placid children may find Snakes and Ladders numbingly dull.

You'll enjoy Hoyle 3's backgammon and dominoes more, but they're not nearly as lively as gems like Battle Chess or Clue Master Detective. That's understandable, because converting board games — essentially social entertainment as much as competition — to the PC is never easy, especially when you pack six in one box.

Put another way, board gamers who are looking for wholesome family entertainment will like Hoyle 3, but folks who want fruit and frosted sugar on their corn flakes should look elsewhere.

Sierra On-Line Inc., P.O. Box 485, Coarsegold, CA 93614, (800) 326-6654; IBM PC, Tandy, or compatible; 286 or faster; 640K RAM; EGA, VGA; supports AdLib, Sound Blaster, Pro Audio Spectrum, Roland, Thunderboard; hard disk, mouse recommended; no copy protection; $49.95

CREATIVE LABS MULTIMEDIA UPGRADE KIT

By Heidi E. H. Aycock

Adding a multimedia upgrade kit to your home computer is a lot like taking knife in hand and playing cosmetic surgeon. Although your PC functions just fine the way it is, you want to give it glamour, beauty, and power.

For less than you think, you can perform some self-guided surgery to smooth the wrinkles on your familiar PC. One of the least-expensive upgrade packages comes from Creative Labs. Its Multimedia Upgrade Kit retails for $850 and includes everything you need to play Dr. I. Liftanything, plastic surgeon extraordinaire, with your PC.

Scalpel, Please

Wash your hands, sterilize your screwdriver, and put your PC to sleep. It's time to operate. Adding the Sound Blaster Pro sound card — one of the main components of the Upgrade Kit — is simple, but does require some strength. The card fits a 16-bit slot so precisely you must

nudge it into place with more force than you'd expect.

But doing that is trivial compared to mounting the CD-ROM drive. After you uncover a disk-drive bay inside the computer, slide the CD-ROM drive under your floppy-disk drives. Once it's in place, connect the drive to the sound card: It has a built-in CD-ROM interface.

The two cables are easy to connect, although you'll probably be working in cramped conditions with almost no visibility. Next, connect the drive to your PC's power source. On my Gateway PC, the internal cords weren't long enough to reach the power interface on the CD-ROM drive.

For a few dollars, I bought an internal power-cord extender at a local electronics store. I also needed to purchase drive rails to secure the CD-ROM drive in its bay. Creative's technical-support staff swore that most PCs don't need either rails or an extender, but you'll be smart to find out whether you do before you get too involved.

Although the process of installing the hardware is challenging, you should be able to finish the job in an hour or two. Pat yourself on the back and close up your PC. The surgery was successful.

Recovery and Rehabilitation

But now comes the nerve-racking question. Did the patient survive? Thanks to Creative Lab's menu-driven installation and test programs, finding out is easy. You install the sound drivers, accessory software, and CD-ROM drivers with a straightforward, one-line DOS command.

Although the tests are easy to perform, the manual doesn't tell you everything. The voice test, for instance, sounds like a babbling brook, not a babbling human being. According to a Creative Labs spokesperson, the next version of the upgrade kit will fix the problem. Difficulties are minor, but frustrating.

Besides hardware, the upgrade kit comes bundled with several CD titles, including Windows with Multimedia Extensions, Microsoft Bookshelf, and ICOM's Sherlock Holmes.

The Multimedia Upgrade Kit includes a CD-ROM drive, an audio card, and software.

Unwind the bandages from the patient's face and see how your handiwork looks. The CD-ROM drive runs fast enough to meet MPC (multimedia personal computer) specs, but like all CD-ROM drives, it's much slower than a hard-disk drive. And because Creative Labs chose a non-SCSI interface for the CD-ROM drive, your options are limited for upgrading to a faster drive in the future. At press time, the drive that came with the kit was still the only one compatible with the Sound Blaster Pro interface.

Creative Labs justifies the choice by claiming that it wanted the highest-quality, least-expensive drive possible. True, when you do upgrade the CD-ROM drive down the line, it will probably come with its own SCSI interface, but that means another trip inside the computer's case and another slot occupied.

Your PC's new stereo sound is clear and sharp — with its two Yamaha FM synthesizer chips, the Sound Blaster Pro works at least as well as the old Sound Blaster and AdLib cards. In fact, when the sound comes from a CD-ROM disc and is processed by the board's DAC chip, it's as rich as your headphones or speakers can play it. The MIDI interface that comes with the kit works fine, and installs as easily as you plug in a joystick.

While the hardware and software work well, the Upgrade Kit's documentation is weak. Because multimedia is a new and somewhat complex technology, strange problems crop up as elements of the system coordinate and conflict. A better manual would not only explain how the kit works, but also what might happen. When I installed Windows with Multimedia Extensions, for example, some necessary files for Microsoft Word for Windows were corrupted. Although the Creative Labs folks aren't responsible for the goof, they might have anticipated the problem and documented it.

A New-and-Improved PC

For a competitive price and with some reasonable effort, Creative Labs offers the tools you need to give your PC a facelift. Just be patient — it never pays to hurry through any process when you've got your hands deep inside the computer.

As multimedia evolves, though, this operation will be less like elective surgery and more like a heart transplant, vital to the quality, or even existence, of home-computing life. Creative Labs' Multimedia Upgrade Kit is a good choice for anyone who wants to start the makeover now.

Creative Labs, 1901 McCarthy Blvd., Milpitas, CA 95035, (408) 428-6600; IBM PC or compatible; 386SX or faster; 2MB RAM; DOS 3.1 or later; VGA; requires 30MB or larger hard-disk drive, mouse; requires one 16-bit expansion slot, one 5.25-inch drive bay; $850

WILD WHEELS

By Wes Nihei

In the future, when we're all driving electric- and solar-powered cars, we'll feel great about the environment. But what's going to keep us entertained? To satisfy the world's need for burning rubber, crunching fenders, and smoking fumes, the United Nations will sanction an international combat racing sport for the last of the gas guzzlers: Wild Wheels, the 21st-century replacement for the NFL.

Ocean's Wild Wheels certainly doesn't test your strategic thinking, but what it lacks in thought it more than makes up for in action. Its European roots show here and elsewhere, for it's similar in concept to sci-fi robo-rugby games such as Arena, which also comes from the U.K.

Wild Wheels is a futuristic arcade-style hybrid of soccer and demolition derby. You control the lead car of a five-car team, guiding your group as it scores goals by pushing a steel-plated orb around a banked racetrack. The game is simple, but effective. At the beginning of each match the steel Power Ball shoots out of the center of the field like a jump ball in the NBA. After that, it's every vehicle for itself. You bump, push, slam, and bounce the ball into the opposing team's goal, all while keeping your adversary from doing the same.

Anything goes, so you can ram and sideswipe opposing cars. Because the edges of the field slope up, the ball never goes out of bounds; instead it always rolls back into play. You still have to figure the angles, though.

The *wild* in Wild Wheels refers as much to the car controls as to the game's action. These autos of the future lack brakes, so you must learn to slide around the arena when you want to change direction quickly.

Playing with the numeric keypad's cursor keys is a maniacal, finger-twisting, button-pressing exercise. Stick with the joystick, even though it's equally frenetic.

A cross between robotic rugby and demolition derby, Wild Wheels is fast paced.

Wild Wheels features three skill levels. Versus the computer, the novice level builds confidence, but expert and advanced are likely to obliterate it. The computer-controlled cars are relentless. If human competition is your bent,

K-D Software
IBM Entertainment Specialists
Great Falls Avenue • P.O. Box 448 • Rochester, NH USA 03867
Orders Only 1-800-533-6772 • Information 603-332-8164 • FAX 603-332-8125

HARDWARE		ADVENTURE		SPORTS		AIR & SPACE	
C.Labs MPC & CD drive	440	Advn. of Willie Beamish	39	Hardball 3	39	Aces of the Pacific	45
C. Labs MPC Upgrade Kit with CD Drive & SB Pro	650	Conquest of Long Bow	39	John Madden Football 2	35	Arbus 320 Flight Sim	52
CH Flight Stick	49	Dagger of Amon Ra	42	Links	39	B-17 Flying Fortress	39
Maxx Pedals	54	Dark Seed	45	Links Course Disks	17.5	Birds of Prey	35
Maxx Yoke	74	DUNE	35	MicroLeague Baseball4	35	F117A Nighthawk vga	49
Sound Blaster	129	Free D.C.!	39	Mike Ditka Football	38.5	Falcon 3.0	49
Sound Blaster Pro	210	I. Jones Fate of Atlent.	42	NFL Challenge (Konami)	60	Funship 2000 vga	42
T. Master FCS Pro	125	Koshan Conspiracy	35	Pro Tennis Tour 2	35	Heros of the 357th	35
T. Master Flight Stick	86	Monkey Island 2	42			Jet Fighter 2	42
T. Master Weapons Conti	86	Out of this World	39	SIMULATION		Mantis: XF3700	39
Thunder Board	99	Police Quest 3	39	Battle Isle	35	Red Baron vga	39
Carmen World DLX CDROM	75	Space Quest 4 vga	39	Car & Driver	42	Secret Weapons of Luft.	45
Dead Falls or Condor	42	The Two Towers	39	Carrier Strike	49	Shuttle Simulator	39
Guin Disk Windows MPC	CD75			Civilization	47	Star Trek 25th	39
Loom CDROM	52	ARCADE		Crisis in the Kremlin	39	Strike Commander	48
Talking Classic Tales	75	Lemmings	35	Flames of Freedom	35	Stunt Island: Fly & File	39
World Vista CDROM	56	Super Tetris	28	Hong Kong Mahjong Pro	35	Thunderhawk	35
More CD's Please Call		Tristan	35	Power Monger	35	Wing Commander #2	48
		Wordtris	28	Rampart	29	Wing Commander Speech	15
				Road & Track	39	Yeagers Air Combat	39
				Theatre of War	35		

•ROLE PLAYING GAMES

•Celtic Legends	35	M&M: Clouds of Xeen	48
•Darklands	45	Might & Magic 3	42
•Dark Queen of Krynn	35	Planets Edge	42
•Dungeon Master	35	Pools of Darkness	42
•Eye of Beholder 2	42	Prophecy of the Shadow	42
•Four Crystals of Traze	35	Ultima 7 vga	49
•Haindail	35	Ultima Underworld	49

Design & Play Your Own Animated VGA games with GAME-MAKER
In Stock 5-1/4 or 3-1/2
$89.00

1-800-533-6772
CANADA NOW TOLL FREE
–FOREIGN ORDERS WELCOME–

2-DAY AIR FREIGHT ONLY $4.00*
New Titles Arriving Daily
FAX 603-332-8125

We ship immediately depending on availability. We accept MC/Visa, money orders, certified checks, personal and company checks with printed street address and telephone numbers, others 2 weeks to clear. Please add $4.00 shipping & handling. We ship C.O.D. through UPS ground at no extra charge. Foreign orders are shipped Air Postal Service, cost is based on weight and destination. Prices subject to change. Compatibility not guaranteed but software is guaranteed. *Per prepaid order, Lower 48 states only.

Circle 94 on Reader Service Card.

two PC drivers can play directly via a serial connection or over a network.

The bright, glitzy graphics images of Wild Wheels look good and flow smoothly, and wouldn't be out of place in the mall arcade. Car designs are colorful, cartoony, stylized, and imaginatively drawn, but not detailed.

Your primary perspective is slightly above ground level, looking from your goal toward your opponent's. The display follows your car around the field, but at times you'll see the car coming at you, not racing away as is usual. The *Tri-Zoom* feature lets you move three steps closer to the action. There's even an on-screen radar map, which projects an overhead view of the field, but it's not much help in the heat of car combat.

Victory depends on aggressive driving and an ability to deploy your auto team across the soccer-style field. Three formation options help out. The build-your-own option is the way to go: You can pick the cars you want in your line-up and position them anywhere on the field before the jump ball.

Your five-car team consists of a *Strike* car (the one you drive) and any mix of the game's other four types of motor machines: *Killers*, *Blockers*, *Fetchers*, and *Guards*. *Killers* seek and destroy rival *Strike* cars, *Blockers* run interference, *Fetchers* run down the Power Ball and pass it toward you, and *Guards* intercept your opponent's shots. Your teammates can be as much hindrance as help, though. They block your path, bounce you away from the ball, or drive the ball into your part of the field.

The *Strike* cars are the key, much like the quarterback in a present-day football game. Only strikers can score points, for instance. And when either team runs out of strikers — you get three, and each can take several hits before it explodes in a brilliant burst of smoke and fire — the round is over and the game tallies scores automatically. As you win games, you move up in the league standings and rack up points, which you use to purchase stronger and more-lethal vehicles.

With Wild Wheels, you get just what you see — a simple and fun-to-play arcade game. For delivering what it promises, no more, no less, it deserves to take a well-earned victory lap.

Ocean of America/Electronic Arts, P.O. Box 7530, San Mateo, CA 94403, (800) 245-4525; IBM PC, Tandy, or compatible; 640K RAM; EGA, VGA, Tandy 16-color; supports AdLib, Roland, Sound Blaster; $49.95

SIMCITY FOR WINDOWS

By Barry Brenesal

Wipe Windows clean of those solitaire decks and toss out the Tetris clones: Now you can put real games and solid simulations on a program manager near you.

One of the most aggressive Windows entertainment developers is Maxis, whose RoboSport was among the first out of the gate. Close on its heels, though, is a Windows version of the company's benchmark product, SimCity. This micro-simulation of urban development, which launched Maxis' claim to power, prestige, and a considerable amount of players' computing time, now appears under the best-selling graphical user interface. SimCity takes to Windows as though it were made for it.

The Little People

SimCity simulates the way humans react to a changing urban environment. The program generates terrain complete with islands, forests, rivers, and shoreline. You choose where to place man-made works such as roads, train tracks, power lines, and commercial and residential zones. Months go by, then the Sims suddenly appear and begin investing in real estate. Their taxes, which you can raise and lower like an imperial IRS, provide the income that's plowed back into future developments, such as road repairs, more shops, or an airport. You'll know what the Sims want — they're not hesitant about saying what they don't like. And they'll move away in droves if you annoy them enough.

SimCity's shift to Windows, and the success it finds in its new home, isn't surprising. After all, almost all Maxis' games originate on the Mac (including SimCity), the machine whose operating system is the genesis for Windows.

If anything, SimCity for Windows is easier to use than its DOS predecessor. Not only can you reconfigure the screen more easily, but several new elements make your task of playing SimGod all that much simpler. For instance, a new *Status Bar* provides helpful, current information on your city. Two nice improvements not available in DOS SimCity are the five bookmark icons and a *GoTo* button, which can save and instantly retrieve five separate map locations.

Another new feature is the *Control Bar*, which lets you access separate city screens quickly, including citizens' evaluation, annual budgets, graphs, and maps. The last two really provide visual submenus — you can examine cash flow, crime, or performance on graphs, for instance, or traffic density, land value, and power on city maps. Some options (such as crime rate and pollution index) are available in either graph or map format.

If you've invested in Maxis' *Advanced Graphics Sets* for SimCity, there's more good news — you can use them with SimCity for Windows. These sets provide a variety of ancient and futuristic architecture, more decorative than any Windows wallpaper design.

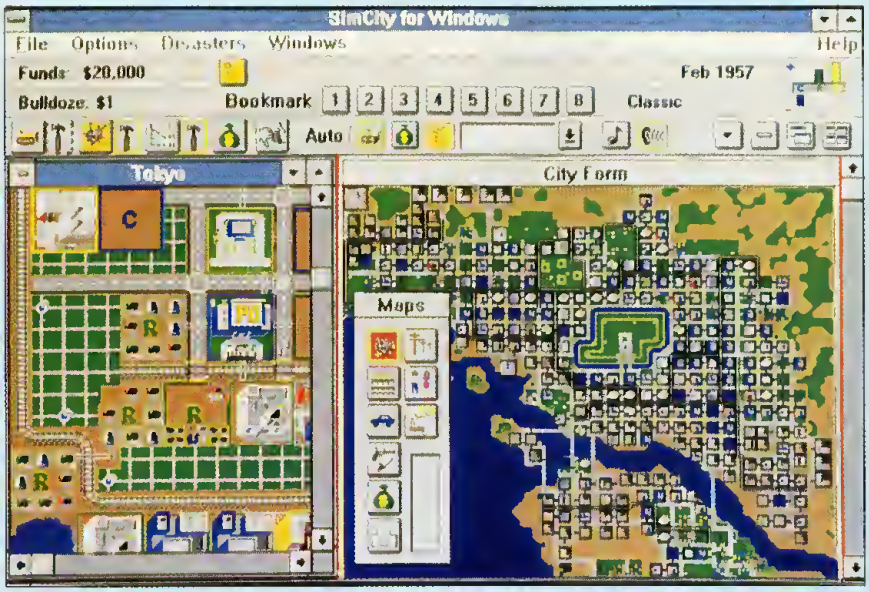
Sims Want More!

The negatives in SimCity for Windows are fortunately all lumped in the "unrealized wishes" category. Music and sound effects, which come out of your PC speaker (and should be pushed right back in), are still weak; Windows wasn't big on sound until its recent 3.1 upgrade, and SimCity for Windows came along just a little too soon to take advantage of the new sound-card drivers.

Also missing is any additional animation; only one train moved through DOS-based SimCity. (There were more, of course, depending on how many lines you laid down, but you didn't actually see them.) Although memory constraints may have been behind the single train in the DOS version, that can't be the excuse under Windows. At least it should have been made a option you could configure.

These are minor criticisms, however. If Maxis Software had done nothing more than transfer SimCity into Windows, the game still would have been a big success. But the increase in ease of use and configurability makes this simulation even more enjoyable. Add Windows' multitasking abilities, and the days of work and play are really, truly at hand.

Maxis Software, 2 Theater Square, Suite 230, Orinda CA 94563, (510) 254-9700; IBM PC, Tandy, or compatible; 640K RAM; Microsoft Windows 3.0 or later; VGA; mouse recommended; $59.95



SimCity for Windows adds new tools to help you better manage urban growth.

MIXED UP FAIRY TALES

By Cynthia E. Field

Even children can take a trip to the Twilight Zone. Sierra's made the vehicle — Mixed Up Fairy Tales — and all kids have to do is take a ride. In this enchanting game of discovery, children browse through five popular fairy tales, helping characters find each other and retrieving magical props. The goal? Live happily ever after, of course.

Not only is Mixed Up Fairy Tales a game and a reading-enrichment tool for kids aged 7 and up, but it's also an ideal interactive "lapware" program for parents of even younger children who can't yet read on their own.

Lori Cole, designer of the popular Quest for Glory adventure, has worked wonders for kids in this, her newest game. Mixed Up Fairy Tales charms even the computer-hesitant child.

As Mixed Up Fairy Tales begins, you find yourself browsing through the stacks at the library. Suddenly a book falls to the floor, and from its open pages emerges Bookwyrm, a stylish dragon. Bookwyrm's in a fix, though.

A trollish instigator named Bookend has rearranged five tales: *Beauty and the Beast, Bremen Town Musicians, Cinderella, Jack and the Beanstalk,* and *Snow White.* If the characters in each story are to live happily ever after, you must bring them together in the Land of Fairy Tales. You must also retrieve the pieces that Bookend's stolen, among them Jack's bag of beans and Cinderella's pumpkin. Only when you find an object and return it to its owner can a fairy tale proceed.

As Bookwyrm's helper, kids choose the hero or heroine they want to play from a half-dozen boys or girls of varying racial backgrounds. These players are depicted in opening-screen portraits and as figures on the playing field.

Mixed Up Fairy Tales features the now-standard Sierra icon interface, although it's been appropriately redesigned for young readers. The menu bar sports *Do* and *See* buttons controlling the two dominant game activities. (You can also toggle between *Do* and *See* icons by pressing the right-hand mouse button.) Click the *See* icon on a tree cavity and you may discover an owl's home; switch to the *Do* icon and click on the hole to watch the owl fly away. Surprise animations add to the game's entertainment value, while vocabulary flash cards and descriptive text enhance the program's educational appeal. Simple sentences such as *The fence is white* characterize each Mixed Up Fairy Tales text passage.

When you come across a fairy-tale character, try to guess his or her correct tale. Pull down the *Fairy Tales* menu and select the title of the story. If you guess correctly, the tale begins, music plays, and a *Once Upon a Time* scroll appears. Whether it's Snow White or a red rose, a picture of each item in your inventory appears in the menu bar.

Mixed Up Fairy Tales doesn't support digitized speech. Instead, characters more or less lip-synch to the printed text that shows in pop-up boxes. When you meet Snow White, for instance, she explains that she's lost and needs help finding the Seven Dwarves' house just south of town. When you click on the compass rose in the menu bar, a map unfolds. A flashing yellow you-are-here beacon helps you pick the best route.

Kids reconstruct fragmented fairy tales in Mixed Up Fairy Tales.

As you explore the beautifully illustrated Land of Fairy Tales, you'll enjoy more than just entertaining sound effects. The sound track in Mixed Up Fairy Tales features appropriate selections from the works of such great classical composers as Bach, Beethoven, and Vivaldi. Bookend's theme includes combative music from Wagner's *The Valkyries*; Snow White's traveling theme is from Mozart's opera *The Magic Flute*; and his mournful *Lacrimosa* plays while you gaze at the lifeless Snow White in her glass coffin.

You can become more familiar with each composer and his work by playing the gramophone in Bookwyrm's living room or by referring to the program *User's Guide*, which provides mini-biographies. The manual also contains the complete text of each fairy tale as well as a list of some three dozen new vocabulary words. The Mixed Up Fairy Tales package even includes a box of four crayons and a diminutive coloring book featuring one scene from each tale.

Reptile Role Model

Bookwyrm is more than just a make-believe friend — he's a genuine, though digital, role model for children. He provides hints to help kids find fairy-tale characters and retrieve objects. Whenever you visit his house, he's lolling in the sunshine — with sun visor and sunglasses, of course — reading a book. At game's end, he graciously promises to help the peevish Bookend learn to read. "Reading is such fun," Bookwyrm enthuses.

Not only does Mixed Up Fairy Tales work for kids who already read, it's ideal for parents whose children can't yet put sounds to letters. With or without adult assistance, small hands can play Mixed Up Fairy Tales with the device that fits best: keyboard, joystick, or mouse.

Mixed Up Fairy Tales accommodates small attention spans, too, because you can save a game anytime. The program can save multiple games begun by up to 20 players, a convenient feature that makes Mixed Up Fairy Tales a good investment for early-learning centers and schools as well as families with several potential players. When they launch a new game, children enter their names by selecting up to ten letters from the colorful alphabet squares on screen. Graphics backspace and spacebar "keys" correct mistakes and let them type surnames.

For a trip to the twilight zone of confused children's literature, nothing beats Mixed Up Fairy Tales. It's an engaging, nonviolent, challenging game that appeals to both genders.

Sierra On-Line Inc., P.O. Box 485, Coarsegold, CA 93614, (209) 683-4468; IBM PC, Tandy, or compatible; 286 or faster; 640K RAM; EGA, VGA, Tandy 16-color; supports AdLib, ProAudio Spectrum, Roland MT-32/LAPC-1/CM-32L, Sound Blaster, Thunderboard; requires hard-disk drive; $49.95

METROGNOMES' MUSIC

By Leslie Eiser

If you listen carefully, you'll hear the sound of tiny creatures making music. No, you haven't disappeared into *Darby O'Gill and the Little People*, or fallen asleep next to Rip van Winkle after a few too many draughts. Those sounds in the distance come from your kids' PC and The Learning Company's Metrognomes' Music, a delightful collection of musical games and activities for children aged 4 to 7.

Sing Along in Style

Gnometown houses a sprightly group of music lovers with pointy hats and smiling faces — the Metrognomes. These adorable creatures are ready to enchant your home's youngsters with their melodic skills.

You'll start in Metrognomes' charming meadow home; it's filled with frolicking folk, a giant mushroom house, a tuneful flower garden, a musical stage, the Gnometown parade, and a picnic party. Search the meadow and you'll find five amusing games, each an invitation to learn a little more about the fundamentals of music. Animated sequences and a sing-along motif combine to create an entertaining environment pointed right at late preschoolers and early-elementary-aged kids.

At the mushroom house, you'll join the Metrognomes' fire department for a game of *Hi-Lo Rescue*. You must

The tiny Metrognomes strike up the band at kids' demand.

decide whether the second of two notes is higher or lower than the first. Get it right and one of the animal inhabitants of this eight-story house jumps out. (Don't worry, there's a net waiting below.) After finishing four missions, the Metrognomes perform, picking a song from their repertory of 27 nursery and folk tunes. (By the way, the Metrognomes don't really sing — they only play the music and show you the words on screen. You provide the voice — Korake style.)

Visit the flower garden for a melodious game of *Memory*. Each of the tunes in the Metrognomes' song book has been divided into four distinct phrases. In *Memory*, each phrase is duplicated, the resulting eight phrases are scrambled, and then they're all hidden under the animated insects that sit on the flowers.

Kids locate the matching pairs by picking among the insects. At the easiest level the repetitive nature of each song simplifies the search. At higher levels, though, there are fewer repeats and youngsters need a better ear before they can match phrases accurately. Fortunately, no one ever loses. If a match is too well hidden, the gnome tending the garden is happy to point out the right answer. Each correct match floats into the clouds, and when all four phases have been paired correctly, you hear the song and see its accompanying animated titles and words.

Keep the Beat

Want to practice keeping a simple beat? Try using the log car at the far edge of the meadow to pick up the members of the Gnometown band. You'll have to strike the spacebar four times at a specified rate before the car moves, a challenging rhythmic task tough for even some adults. Fortunately, Metrognomes' Music monitors success and failure, and adjusts the difficulty accordingly. If you're consistently off, error tolerance increases, making the task easier. During the next round the computer automatically picks a target beat close to your natural rhythm.

Once you've gotten the hang of matching a beat, Metrognomes' Music toughens the task gradually by slowing down the pace and decreasing error tolerance. Your reward for finally getting the right beat? The Gnometown band cheerfully performs foot-stomping versions of *Yankee Doodle Dandy*, *Stars and Stripes Forever*, or *When the Saints Come Marching In* to an enthusiastic crowd.

Free play is an important part of edutainment, and Metrognomes' Music's no different. The Gnometown stage is a perfect place for young music lovers to reinforce ear-training

Excite Your Computer

. . . Preview some software

Call

1-800-433-2938

for a free listing
or to place an order

AMIGA * IBM * MAC
ATARI * CD ROMS
GRAFIX - 16
GENESIS

Also

Computers Modems
Printers * Drives

WEDGWOOD COMPUTER

5312 Woodway Drive
Fort Worth, Texas 76133

MasterCard VISA AMERICAN EXPRESS DISCOVER

Circle 46 on Reader Service Card.

ADVERTISERS INDEX

RS #	ADVERTISER	PAGE
41	Access Software	28,29
29	Accolade	36,37
22	ATI Technologies	21
19	Chips & Bits	62,63
5	Creative Labs	CV. 4
*	I.B. Magazette	9
62	Interplay	49
94	K.D. Software	75
2	Lance Haffner Games	83
40	Media Vision	25
78	Microprose	55
11	Microprose	7
16	Microprose	35
48	Microprose	27
12	New World Computing	3
50	Origin Systems	66
90	Origin Systems	67
98	Recreational Software Design	34
15	SMC Software Publishers	80
121	Spectrum Holobyte	CV.3
36	Spectrum Holobyte	15
*	Strategic Simulations, Inc.	31
*	Strategic Simulations, Inc.	5
64	Virgin Games	19
21	Virgin Games	CV.2/1
37	Virgin Games	61
46	Wedgewood Rental	79
57	XOR Corporation	71

F R E E

53 GREAT PC EGA/VGA GAMES

TRY THESE 53 GAMES TODAY!

ALDO'S ADVENTURE • BASS CLASS • BLUE BALLS • CADDIE HACK • CATCH'EM • CHECKERS • COLLIDE • COMMANDER KEEN • CRAPS COMPLETE • CUNNING FOOTBALL • DARK AGES • DOUBOLO • EGAINT • EGA ROIDS • EGA TREK • FRAC • GRAVITY WARS • HEX JUMP • HUGO'S HOUSE OF HORRORS • HUGO II,WHODUNIT • IDIOT'S DELIGHT • INTRA GALACTIC BATTLES • KALAHA • LEONG • LOVER MANAGER • MIDNIGHT OIL • MIND CUBE • MORAFF'S PINBALL • MOUSE JET • MOUSE WAR • PACHISI • PALLANDA • PC FENDER • PICTURE PUZZLE • POKER SOLITAIRE • REFLEX • SAN DIEGO POLY • SCUD ATTACK • SHERLOCK • SHUTTLE RESCUE • SLOT • SMART SOLITAIRE • SOLITAIRE • SOLITILE • SQASHER • SUPER FLY • TANGLE • TANK WARS • TRIBOLO • TWO BIT POKER • VGA SHARKS • ZJZ RISK

SMC SOFTWARE PUBLISHERS

619-931-8111 Ext. 511

This collection requires an IBM® or compatible computer, 640K of memory,(hard disk preferred), and EGA/VGA. Available on 15/5.25" or 8/3.5" disks. Pay only $5.00 shipping and handling. Foreign add $5.00 per collection. Credit cards only.

Circle 15 on Reader Service Card.

skills and pick up a painless introduction to musical notation.

Five multicolored xylophones stand ready, each keyed to a different scale. There's a standard eight-tone xylophone with a major pentatonic scale, the same scale on which most American folk songs are based. Other xylophones offer Asian, jazzy, spacey, or country-&-western-sounding scales. Switching xylophones changes the preset tune and the feel of the music, but kids are free to create their own tunes in any of the scales by manipulating the individual notes. Clicking on the conductor changes the rhythm pattern without changing the note values, creating subtly different melodies. Each xylophone has its own set of animated performers eager to play your original composition on their instruments. (Choices include clarinet, flute, guitar, pipes, oboe, chimes, and blocks.)

Last but not least on this Metrognomes tour is the Gnometown picnic grounds. Here's your chance to hear each of the 27 songs, complete with words and animated graphics. Just pick a picture from the Gnomes' picnic quilt and sing along. Youngsters will appreciate the opportunity to learn the words to the songs they don't know, practice the songs that they do recognize, or just get familiar with the tunes. Some will even be content to just relax and listen.

Metrognomes' Music provides young PC players with an attractive, entertaining, and educational musical experience. Music is a universal language, and this program offers an amusing introduction to traditional tunes. Along the way, it gives kids the chance to learn rhythm and beat, to distinguish between high and low pitch, and even to create their own simple compositions. The beat goes on with Metrognomes' Music.

The Learning Company, 6493 Kaiser Drive, Fremont, CA, 94555, (800) 852-2255; IBM PC, Tandy, or compatible; 512K RAM (640K RAM for Tandy); DOS 2.0 or later; CGA, EGA, VGA, Tandy 16-color; supports AdLib, Sound Blaster; mouse optional; no copy protection; $49.95

MAGIC CANDLE II

By Bernie Yee

May Mindcraft's other children have easier births. Magic Candle II, the long-awaited follow-up to the award-winning Magic Candle, is finally out. It carries on the legacy of the original — excellent game play and an interesting story line, with a well-written paragraph book to fill in the plot. Unfortunately, the delivery may have been premature.

Magic Candle II has fallen prey to the same late-is-great syndrome that's plagued other major role-playing game developers, such as Origin and Sir-Tech. The delays in release were attributed to including the now *de rigueur* VGA graphics and digitized sound.

Although Magic Candle II is a good, sometimes excellent, game, Mindcraft should have resisted its release a little longer and worked out some of the bugs. Although it's understandable when a graphics extravaganza like Ultima Underworld or Falcon 3.0 shows a few cracks here and there, in a game like Magic Candle II, which has a decidedly retro feel to it, bugs are simply inexcusable.

Magic Candle's technical problems are important enough to warrant immediate attention. The latest revision of Magic Candle II (at press time) is version 1.40. A mouse patch is about to be released in the coming months as it's finalized. (That's significant because the manual devotes a good deal of space to the mouse option; there's no question it would make the game easier to play.)

Let's hope it will correct some of the problems I encountered with version 1.30. Earlier releases have enough problems — such as non-playing characters who are supposed to give you hints, but don't — that Magic Candle II is impossible to finish. The most annoying problem encountered was intermittent game crashes. Magic Candle II apparently didn't agree with my 486/33, Sound Blaster Pro-equipped machine, even when I pared down the boot process with a clean floppy disk with minimal CONFIG.SYS and AUTOEXEC.BAT files. When I chose the AdLib sound option, however, the game ran fine. Unfortunately, the Sound Blaster effects are audibly superior.

Still, the game itself continues the Magic Candle saga and shows its ancestry well. In Magic Candle II, you try to discover what happened to the Magic Candle's 44 guardians.

The game system itself is like an early Ultima, a top-down system that displays little animation and detail, but is otherwise colorful and pleasingly simple. It also has the virtue of being instantly familiar to anybody who's played the ubiquitous top-down role-playing games. Each town and location looks different, and Magic Candle II sports a large tile palette from which to choose. Digitized sound effects seem a little out of place, and contributed to my technical difficulties.

Interaction is the order of the day, because much vital information is acquired by talking to non-playing characters. Your charisma determines whether certain non-playing characters talk to you; if you complete certain quests for them, they may offer some valuable information. Of course, libraries constitute a great source of arcane data, too.

You can recruit more than 30 non-playing characters to join your party, and their faithfulness is determined by personality (some are just downright flaky) and your own loyalty rating. Like its predecessor, Magic Candle II lets you send party members off to complete different tasks, such as memorizing spells or working for a gem cutter, while your hero follows up the main quests at hand. There's a lot to do, because Magic Candle II expands the game environment and provides a huge continent to explore.

The interface is definitely a throwback to the days before the carry-all command *Use* was implemented recklessly across fantasy role-playing games. A mouse would have been nice, but arrow keys and the numeric keypad control movement and

You'll encounter old comrades who want to join your quest in Magic Candle II.

execute commands adequately. Automapping is implemented from the beginning without having to find or acquire a spell or map — a big relief. And, best of all, Magic Candle II includes a note-taking feature that records all conversations.

Magic Candle II has an expanded magic system as well. New spells complement the bigger world. Of course, the various reagents from Magic Candle are back, making your party's backpack look like the cupboards of a Chinese herbalist. And the dizzying array of items are well explained in the plain, but quite readable, documentation.

There are definite quirks, though. Resurrection, for example, is allowed only immediately after combat. Although the program tells you this, you're still stuck if you haven't memorized the spell. The lesson here is save often.

There's no question that Mindcraft has properly eschewed glitz for a solid, substantive game system that provides interesting, exceptionally balanced game play. But the effort is incomplete. A stable gaming environment is a must if you're not on the edge of EMS-twisting, digitized-voice-over, cutting-edge technology.

There's a solid game here somewhere, but its engine has a few too many rough edges. Mindcraft shouldn't be so fast to mimic Microsoft's example. Not many of us will wait for version 3.0 before we're ready to play on the PC.

Mindcraft Software, 2291 205th Street, Suite 201, Torrance, CA 90501, (800) 525-4933; IBM PC, Tandy, or compatible; 8MHz or faster recommended; 512K RAM; EGA, VGA, Tandy 16-color; supports AdLib, Roland, Sound Blaster; requires hard-disk drive; $59.95

ANNABEL'S DREAM OF ANCIENT EGYPT

By Tom Carlton

Travel without the travails of punching tickets and bad food — travel, in fact, deep into the past, courtesy of your PC and CD-ROM drive.

That's the promise of Annabel's Dream of Ancient Egypt, a multimedia delicacy served up on compact disc. This bill of fare is entertaining and engaging, yet intellectually nutritional. Based on a delightful children's adventure featuring Annabel the cat, this "edutainment" title lets you venture into gourmet dishes fired in the desert lands of the Pharaohs, spiced with the works of the Nobel laureate Rudyard Kipling, stirred with the music of *Aida* by Verdi, and colored by ancient Egyptian paintings from the Oriental Institute of the University of Chicago.

Let's start with the story of Annabel. Entranced by the music of *Aida*, she imagines herself dancing among the priestesses in the Temple of Vulcan. She dreams of a country "far across the rippling sands, just this side of the reeds and rushes that bordered the quiet blue river," of landscapes with "trees, rising tall and stately . . . broad, rattling leaves, like leathery fans spreading over clusters of tropical fruit." And the story unfolds. While you read, you listen to a pleasant voice telling it. At the same time, this animated storyboard offers rich images and triumphal music.

Annabel enters ancient lands of great limestone cats and giant tombs of kings. In a royal garden she meets a queen, Lady Bastet, a wise cat of great age. "Your unhappiness brought you here," the queen suggests. "It's my sister Bianca; she teases me all the time," responds Annabel.

The queen tells the tale of the Ethiopian princess Aida, captured by her father's enemies and made a slave. Even as a slave, says the queen, Aida kept her royal bearing and because of this was treated with respect. Being a queen starts in one's thoughts and intentions, she insists.

"Meooooow," Annabel screams as the frisky Bianca claws her tail, bringing her back to reality. Leaving this land of her heart's desire, Annabel considers running away from home. What lessons of coping with life's problems will she learn? Sincere, sensitive, and succulent, Annabel's dream is the entrée to the rest of the banquet.

A carousel of activities add gusto to Annabel's Dream of Ancient Egypt. *Scrambled Letters* lets you drag-and-drop letters into boxes in correct order. Containing words from the story, such as *pharaoh*, *whiskers*, *banister*, and *frightened*, this alphabet soup should satisfy the palate of older kids.

Further challenging your reading

comprehension, *What's Happening Now?* lets you recall the story and its characters. While looking at a character in a scene from the story, for instance, you're asked to remember which cats liked to play games. After you contemplate, click on the *Hint* button to hear this page from the story. Such an easygoing approach to reading comprehension works without intimidation.

Select the 1000-word glossary to read definitions and hear pronunciations. Anytime during the story, click on a word to activate the talking glossary — a very clever assist for learning to read.

The *About Egypt* geographical and historical menu presents a rich variety of maps, pictures, and narratives to explore. You'll discover the settling of the Nile, and follow a synopsis of more than 5000 years of history of powerful families from the First Dynasty to King Tut and beyond. You'll also learn about plants, animals, and magnificent monuments. More awaits in the stories of Sami of Cairo and Abo Elkar, a Bedouin pastoralist of the Great Desert, who tell of Egypt's present day. And you can listen to excerpts from Verdi's opera *Aida*, a story told completely in song.

More to Explore

For more diverting entertainment, Annabel's Dream offers the *Cat Gallery* and *Ancient Egypt Gallery*, coloring books with an on-screen palette of 16 colors. Kids can even print the pages for Crayola, watercolor, or marker painting later.

Children also can write and decode secret messages using the *Hieroglyphics Translator*, which assigns enigmatic symbols from ancient Egyptian writing for each letter of our alphabet. Although an Egyptologist friend of mine indicated this assignment was mostly fanciful, it remains a real delight regardless.

Two more-tantalizing offerings for family or group projects are *Making Paper* and *Digging Up the Present*. These are takeoffs on papyrus making and archaeology. A complete list of materials, instructions, and illustrations guides you though a real papermaking project. This may be a little messy; you may want a pair of rubber gloves for your archeological dig through neighborhood trash cans.

If you have trouble exploring Ancient Egypt with Annabel, the software steps accompanying an *About This Disc* item give adequate instruction on using the simple icon-based navigation system. *A Note for Parents/Helpers* provides excellent assistance far beyond what you might expect. In *Exploring Life Situations*, you'll find interesting materials on subjects that range from handling a child's anger to how to handle pressure. All are very professionally presented.

You'll find this land of Goshen a fertile field. As entertainment goes, it's good. As educational tools go, it gets an A. As a CD-ROM title for Windows, it rates 4 out of 4. Sit down, pull up a chair, and feast on Annabel's Dream of Ancient Egypt from Texas Caviar. *Bon appetit.*

Texan Caviar, 3933 Spicewood Springs Road, Suite E-100, Austin, TX 78759, (512) 346-7887; IBM PC, Tandy, or compatible; DOS 3.1 or later; Microsoft Windows 3.0 or later; requires CD-ROM drive; $85

AL MICHAELS ANNOUNCES: HARDBALL III

By Cameron Crotty

This hasn't been a great year for baseball. In May, John Goodman starred in *The Babe*, a mediocre movie about a great player. After a powerful start, Jose Canseco's batting average slumped below .200 for three horrible weeks. The Boston Red Sox found new and exciting ways to blow one easy win after another, and Bo Jackson hobbled toward second like a wounded bull dodging the toreador.

COMPUTER SPORTS GAMES

IBM • APPLE II • C-64

THE MOST REALISTIC STRATEGY/SIMULATION COMPUTER GAMES ON THE MARKET TODAY!

3 IN 1 FOOTBALL
Unmatched statistical accuracy • Stats compiler • Full team and player statistical breakdown • You call the plays and timeouts • Compare scouting reports • Use the two-minute rule • Over 500 teams included, pro and college from 1948 to present!

FULL COUNT BASEBALL
You manage all 26 most recent teams and 52 great past teams • 45 man roster • Stats compiler • Complete boxscore to screen/ printer • Input your own teams, draft or trade players • Wind/Weather Option • You choose starting line-up, batting order, bunt for a hit, steal, DH option and much, much more!

WORLD CLASS - TRACK & FIELD
(IBM, C-64)
Includes 600 athletes from over 40 countries complete in 20 events. • Sprinters rated for starts, mid-race, finish, ability to run curve and consistency • Distance runners rated for endurance, consistency and can be run at 5 different paces • Field competitors rated for their performance in safe, normal and super efforts.
Barcelona Disk– FREE with Order
Includes most participants in 1992 Games

Many past season's discs available. For more information, write or call for free brochure.

ORDER TODAY! Mail check or money order for $39.95 each for Apple II or C-64 or $49.95 each for IBM, or call in and order with VISA or Master Card. Please add $3.00 for shipping and handling.

©LANCE HAFFNER GAMES

P.O. BOX 100594 • NASHVILLE, TN 37224
615/366-8088

Circle 2 on Reader Service Card.

But just as events were at their bleakest, Accolade stepped up to the plate and released HardBall III, featuring the famous voice of Al Michaels. Would it mark the season's turning point? Let's see.

The Windup

So what do you do when a celebrity endorses your baseball game? If he's a coach, you include gritty coaching strategies. If he's a player, you put him on the VGA field of dreams. But an announcer — what then? You have him call your own private electronic ballgame, of course.

To squeeze Al Michaels into the PC, HardBall III splices together a basic vocabulary of words, numbers, and Al-isms to cover the action on the field. As each player comes up to bat, for instance, Al announces him by number and position, then gives you his batting average and how he's done at the plate during the game. Once the ball is in play, Al follows the action. One caveat: Don't count on Al's call for your fielding choices. A ball that Al says has been "lined to second base" isn't necessarily one you can catch for an out.

There are plenty of trademark clips for fans. If you paint the corner of the plate for the third strike, Al growls, "In there! That's two away." The vocabulary is varied enough to sound realistic and spontaneous, and covers nearly every possible event on the field.

How does Al sound? Digitized. The quality of the individual sound bites is good, but the sentences are unavoidably choppy. Al ends up sounding like a second-grader struggling through a difficult book. It's fun for a while, but the appeal wears off after the ninth or tenth time you've heard, "Up at bat . . . number thirty . . . five . . . the . . . center . . . fielder."

Remove Al Michaels and you're left with a program that's more game than simulator. HardBall III ships with two 26-team leagues. But instead of real players with real statistics, you get imaginary athletes. There are currently no expansion disks planned, but you can import players and teams from Tony LaRussa's Baseball, Earl Weaver, and earlier versions of HardBall.

Multiple windows in Hardball III show the batter and the baserunners ready to go.

Once you get by Accolade's aggravating copy-protection code wheel, you can play an exhibition game or simulate an entire season. The player and team-editing functions are easy to understand, so creating your own isn't much of a hassle. You can select a picture for each player from a file of more than 30, alter your team's cap and jersey color with a key click, and, if you're so inspired, edit the team emblem in 256 colors.

Once you've chosen two teams to do battle or you've "bought" a team to follow through a season, you head for the field. The action part of Hardball III starts out by compressing almost the entire ballpark into one screen, which makes for some interesting problems with relative player size and perspective. Pitch- and swing-selection controls are logical. Fielding-strategy controls are finally easily accessible from the pitcher's selection box. HardBall III also lets the hitter choose where he wants to swing as the pitch is coming. You won't be able to turn a .223 hitter into a power-alley monster, but you can make a difference.

Fielding is a nightmare. The program lets you cycle easily among active players, but at the cost of controlling whether your player dives or jumps after the ball when you use a joystick. The size and perspective mismatch between players and the field, and some slightly jerky animation, make fielding a guessing game, especially once the ball leaves the infield.

Finding landmarks is another problem. The computer may know where all the bases are, but you'll end up dancing around as you try to spot the base to make a putout. And if you're not personally controlling a specific player, his behavior can be frustratingly erratic. Heave a ball to the catcher for a play at the plate and all too often he leaves home plate open, letting the runner score.

Through all of these difficulties, the game still looks good. MindSpan, the design and development brains behind Hardball III, has done sensible work on the pitcher/hitter/coach interface, making it one of the best in the business. Other neat visual touches include a camera screen that shows close plays at the bases, just like on TV.

All in all, it's not a bad package, but more time should have been spent

on the mechanics of the game rather than on its window dressing.

Post-Game Show

Celebrity endorsements of sports software are all the rage, but most publishers choose a player or coach to hype their wares, under the theory that a game endorsed by a real major-league star will be more life-like.

It's fitting then, that Accolade chose Al Michaels to back HardBall III. Al Michaels is one of the most recognizable figures in sports, but as a face and a voice, not as an active participant. That's a bit like what you'll feel when you play — if nothing's happening on the field, at least HardBall III looks and sounds pretty good.

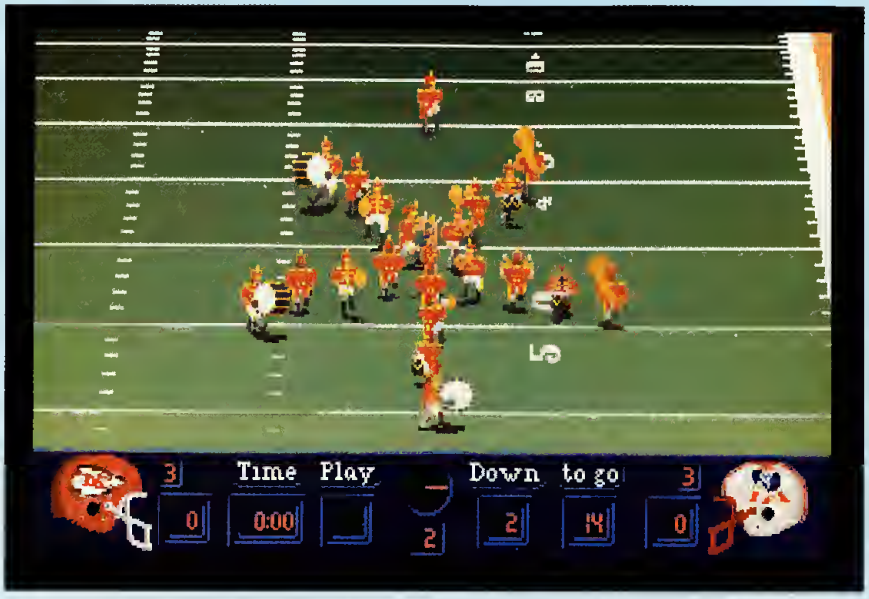
"Just like on television" is a good way to describe Hardball III. This is baseball from the announcer's box, the fan's seat: It looks good, sounds good, too. Unfortunately, once you bite into this ballpark hot dog, you'll find more filler than frank.

Accolade, 550 South Winchester Boulevard, Suite 200, San Jose, CA 95128, (408) 985-1700; IBM PC, Tandy, or compatible; 10MHz or faster recommended; 640K RAM; digitized play-by-play commentary requires 2MB; EGA, VGA, MCGA; supports AdLib, Roland MT-32/LAPC-1, SoundBlaster; requires hard-disk drive; joystick and mouse optional; off-disk copy protection; $59.95

NFL

By Dan Muse

Baseball may be the national pastime, but football is the national obsession. If you're a pigskin junkie, what you need is a regular football fix — and there are a lot of computer games out there just waiting to get you ready for the new season. The latest company to try its hand at producing a realistic football simulation is Konami with NFL. It's got all the basic elements all right, but here's the real issue: Will it make you want to jump up and do the wave — or just jump up and shut off the computer?



NFL is fun and action-packed, but it doesn't sweat the details.

It's no secret that some sports translate from the playing field to the computer screen better than others. Football is one of the more challenging. It's the ultimate team game. The expression "you're only as strong as your weakest link" is never more true than in football. For a successful pass play, for example, you need good blocking, a good decision by the quarterback, an accurate pass, a shape pass pattern by the receiver, and a successful catch by the receiver. And, of course, a clever defensive scheme can ruin an otherwise well-executed offensive play. Because of these intricacies, simulating a football game is difficult.

Now Distinctive Software, the company that developed NFL for Konami, takes a good run at simulating what's perhaps the most American of all sports. And overall, NFL is fun and fast action. If the game were an actual football team, however, you'd categorize it as exciting to watch, but incapable of winning the big one — the Super Bowl — because it doesn't sweat the details.

Konami has licensed the use of the NFL and team logos, which make the game fun. You can pick your favorite team and watch its colors moving up and down the gridiron. (By the way, NFL's graphics images are stunning.)

The use of the NFL insignia and team helmets may imply something that the game isn't, though. While you get to choose a real team — the 49ers, for example — the players are fictitious. Securing all the required licenses to use not only the NFL and team logos, but the players' names and stats, as well, would have been a logistical and financial nightmare — requiring an additional license with the NFL players' association and, in some cases, even the players' agents. Let's face it: Like it or not, sports is big business.

That doesn't detract from game play, however. And you can edit the names and attributes of your fictitious players to make them reflect real-life players if you like. And NFL is fun to play even without the big names — especially if you use those of your friends. It's fun to see your name on screen during NFL's post-play commentary. If you'd prefer to skip it, just turn it off from the *Game Options* screen. You can also indicate whether you want to *Coach Only*, as well as choose *Automatic Subs*, *Penalties*, *Fatigue*, *Injuries*, and other details of the game. You can pick from three quarter lengths, too: five, ten, or 15 minutes.

The goal in NFL is to reach — and,

of course, win — the Super Bowl. Select your team from a list of all the NFL franchises; modify it as you'd like. You can even create your own offensive and defensive plays fairly easily by editing the playbook. You're limited, however, to eight new offensive plays and four new defensive plays; football aficionados will want more.

Unfortunately, the manual doesn't do a good job of describing how to best use the playbook's features. It's intuitive enough to let you build a play, but it could go a lot further in helping you plan a strategy. In fact, that's a consistent problem throughout the package: There's plenty of game here, but it's not particularly well documented.

For example, let's say you love football, but you haven't mastered every nuance. The first time you go on defense you have to select among schemes such as *30 Mish Cover 2*, *30 Over Flop Cover 3*, and *30 Over Stack Mish Mash*. If you study the diagram you can pretty much figure out what's going on, but it's definitely not for the faint of heart. Nowhere does the manual or on-line help system suggest what your basic run defense should be, for instance. At the very least, the program should let you default to a recommended defense and then let you go from there.

On the plus side, the off-disk copy protection is fairly painless, by today's code-wheel and count-the-lines-and-words standard.

Passing and kicking, historically the two most difficult aspects of football simulation, are challenging but conquerable. NFL's passing takes a while to get used to. Basically, you try to hit your primary receiver — identified by a triangle. If he's covered you can move on to the secondary receivers. The kicking/punting interface is reminiscent of some golf games: A bar appears on screen and you hit the key or joystick button to indicate power and release it for direction. Again, it's different, but not a difficult technique to master.

Almost a Champ

NFL does have a few things that will bug true football fans: For one, the clock starts when the ball is kicked rather than when it's touched. And when your opponent commits a penalty, you must accept or decline it before you know the result of preceding play.

NFL is fun to play and fantastic to look at. It's probably worth the investment if you're a football fan, but I can't help but think that with a little more work it could have been a champion. ❑

Konami, 900 Deerfield Parkway, Buffalo Grove, IL 60089-4510, (708) 215-5111; IBM PC, Tandy, or compatible; 640K RAM; DOS 2.1 or later; 12MHz or faster recommended; EGA, MCGA, VGA; supports Roland, AdLib, Sound Blaster; hard-disk drive recommended, joystick optional; off-disk copy protection; $49.95

PCCames is a publication of International Data Group, the world's largest publisher of computer-related information and the leading global provider of information services on information technology. International Data Group publishes over 178 computer publications in more than 55 countries. Thirty million people read one or more International Data Group publications each month. International Data Group's publications include: ARGENTINA's Computerworld Argentina, Infoworld Argentina; ASIA's Computerworld Hong Kong, Computerworld Southeast Asia, Computerworld Malaysia; AUSTRALIA's Computerworld Australia, Australian PC World, Australian Macworld, Profit, Information Decisions, Reseller; AUSTRIA's Computerwelt Oesterreich; BRAZIL's DataNews, PC Mundo, Mundo IBM, Mundo Unix, Publish; BULGARIA's Computerworld Bulgaria, Ediworld, PC World Express; CANADA's InfoCanada, Network World Canada, Direct Access, Graduate Computerworld; CHILE's Computerworld, Informatica; COLOMBIA's Computerworld Colombia; CZECHOSLOVAKIA's Computerworld Czechoslovakia, PC World Czechoslovakia; DENMARK's CAD/CAM World, Communications World, Computerworld Uddannelse, PC World Produktguide, Windows World, Computerworld Danmark, PC World Danmark, Macworld Danmark, Computerworld Focus, Lotus World, Macintosh Produktkatalog, LAN World; ECUADOR's PC World; EGYPT's PC World Middle East; FINLAND's Mikro PC, Tietoviikko, Tietoverkko; FRANCE's Le Monde Informatique, Distributique, Golden Mac, Languages & Systems, Computer Direct, InfoPC, Telecoms & Reseaux International, Le Guide du Monde Informatique; GERMANY's Computerwoche, Computerwoche Focus, Computerwoche Extra, Computerwoche Karriere, Edv Aspekte, Publish, Information Management, Macwelt, Netzwelt, PC Woche, PC Welt, Unix Welt, Unit, Lotus Welt; GREECE's PC World Greece, Infoworld, PCGames; HUNGARY's Computerworld SZT, Mikrovilag, PC World; INDIA's Computers & Communications; ISRAEL's Computerworld Israel, PC World Israel; ITALY's Computerworld Italia, PC World Italia, Macworld Italia, Networking Italia; JAPAN's Computerworld Japan, Macworld Japan, SunWorld Japan; KENYA's East African Computer News; KOREA's Computerworld Korea, Macworld Korea, PC World Korea; MEXICO's Computerworld Mexico, PC Journal, Compu Edicion, Compu Manufactura, Computacion/Punto de Venta, Macworld, Mundo Unix, Windows; THE NETHERLANDS' Computerworld Netherlands, LAN, Macworld, Computer! Totaal; NEW ZEALAND's Computerworld New Zealand, Computer Listings, New Zealand PC World; NIGERIA's PC World Africa; NORWAY's Computerworld Norge, C World, PC World Norge, PC World Ekspress, IDG Direct Response, Lotus World Norge, PC World's Product Guide, Student Guiden, Publish World, Macworld Norge, Networld, Unix World, Windowsworld; PERU's PC World; PEOPLE'S REPUBLIC OF CHINA's China Computerworld, PC World China, Electronics International; IDG HIGH TECH Newproductworld; PHILIPPINES' Computerworld, PC World; POLAND's Computerworld Poland, Komputer; ROMANIA's Infoclub; RUSSIA's Computerworld Moscow, Networks, PC World; SPAIN's CIMWorld, Communicaciones World, Computerworld Espana, PC World Espana, Macworld Espana, PC World Autoedicion, AmigaWorld, Publish; SWEDEN's ComputerSweden, Mikrodatorn, Macworld, CAD/CAM World, Lotus World, Windows, PC World, Lokala Natverk/LAN, Affarsekonomi Management, Attack, CAP, Datalngenjoren, Data & Telekommunikation, Maxi Data, Digital Varlden, Unix/Oppna System, Mac&PC, Publishing & Design; SWITZERLAND's Computerworld Schweiz, Macworld Schweiz, PC & Workstation; TAIWAN's Computerworld Taiwan, PC World Taiwan; THAILAND's Thai Computerworld; TURKEY's Computerworld Monitor, PC World Turkiye, Macworld Turkiye; UNITED KINGDOM's Lotus, Macworld; UNITED STATES' AmigaWorld, Cable in the Classroom, CIO, Computerworld, Computer Buyers World, Digital News, DOS Resource Guide, Electronic News, Federal Computer Week, GamePro, inCider/A+, IDG Books, InfoWorld, Lotus, Macworld, Momentum, MPC World, NeXTWorld, Network World, PCGames, PC World, PC Letter, Publish, Run, SunWorld, SWATPro; VENEZUELA's Computerworld Venezuela, MicroComputerworld Venezuela; YUGOSLAVIA's Moj Mikro.
Problems with Advertisers: Send your current address and a description of the problem to *PCCames*, 80 Elm Street, Peterborough, NH 03458, attention Rita Rivard, Marketing Assistant/Customer Service Manager. If urgent, call (800) 441-4403, (603) 924-0100 in New Hampshire.

DESIGNERS' NOTES

NEW PERSPECTIVES

Sports games need to take a cue from flight simulators, and get players off the ground.

By Mike Suarez

Jordan soars on screen, too, thanks to 3D flight-sim technology.

In the not-so-distant past, computer sports games weren't so much limited by the machine's performance as by traditional preconceptions of how sports should be viewed. Game designers consistently based their presentations on the spectator's perspective, and, as a result, the computer gamer always felt as though he or she were playing a remote-control toy from the upper decks of the stadium. These 2D play fields were flat, and crowded with cartoonish characters. The gamer never felt involved.

With the introduction of TV-like presentations and close-up field perspectives, graphics and entertainment value climbed. But these features didn't improve our ability to experience the action. Basketball in particular hit a wall. What were games missing? Certainly not hot names: Everyone from Magic to Malone was slapped on a box and kicked out the door.

The idea behind **Jordan In-Flight** (distributed by Electronic Arts) began with what game producers have traditionally used for inspiration: a healthy dose of frustration and a leap in technology.

Unlike football, basketball is incompatible with overhead perspective. In a fight for real estate you have to have a clear view of the battlefield — but basketball isn't a set-piece battle for turf. It's less structured, more fluid, more 3D; the visual perspectives required to create a sense of participation are complex.

What all basketball games were missing — what only a leap of technology could provide — was air, literally and figuratively.

What PC hoops needed was digital video animation that looked like TV, plus top-notch 3D flight-simulation technology so that the gamer could watch his or her players get off the ground.

We made two smart moves. First, we hired a first-rate professional video crew, Nocturnal Aviation of San Francisco, with their proven track record in film and TV production. Second, we secured the services of a software engineering firm, ZCT Systems Group of Tulsa, Oklahoma, a veteran of government and civilian flight-simulator projects. Greg Zumwalt and his crew devised an extraordinary system for scaling and animating Jordan's video images to eliminate the usual speed and perspective problems.

Even though I think In-Flight propels computer sports toward the future, sports games still have a long way to go. I only hope that tomorrow's entertainment developers avoid confusing technology with content. That kind of thinking perpetuates the creation of dry sports "simulations." The technology is only the form through which we bring the content of our sports games to life.

And what will the content be? Tomorrow's computer sports players will get significantly more-engrossing experiences — assuming the roles of players, coaches, and owners on and off the simulated court. CD multimedia interfaces will re-create the drama and emotion of playing in the pros.

In the long term we'll get the ultimate: You'll videotape your own and your friends' moves, slap them on a CD, download them to the Sports Fantasy Channel (256 on your dial), and watch yourself and your buddies get creamed by the Chicago Bulls on interactive HDTV.

Better yet, head on over to the local virtual-reality park and take on the video representations of the Bulls in person. Just remember that Michael likes to cut in the direction of your leading foot. ❑

Mike Suarez is president of Pacific Gameworks, a San Francisco-based independent designer and producer of multimedia entertainment. Credits include Joe Montana Football (IBM), Face-Off Hockey (IBM), Tongue of the Fatman (IBM), and Mondu's Fight Palace (Sega Genesis). Pacific Gameworks is currently designing a new line of CD-ROM sports and adventure products.

PC GAMES EDITORS' Choice

ZEN MOMENTS

By Cynthia E. Field

Face it — even PC gamers who get their kicks blowing away computer characters and pulverizing enemy targets need a break from the frenzy. And a perfect change of pace — whether a brief respite from a sweaty-palm war game, the workaday world, or life's concerns — is **Heaven & Earth**, a relaxing diversion that provides just the stress-reducing counterpoint you need. I wrote this preview just before April 15th, so I know what I'm talking about.

Published under the new Buena Vista Software label by children's favorite Walt Disney Computer Software, Heaven & Earth is the first in a series of games for older players. Heaven & Earth was inspired by the legend of Shambhala, an ancient utopia immortalized in Tibetan Buddhist mythology, and comes from the creator of such classics as Shanghai and Ishido.

The program's on-line user's guide explains that the universe of computer entertainment is populated by games, toys, and puzzles. Not surprisingly, then, Heaven & Earth's three Zen-like activities include something for everyone.

The rummy-like *Heaven & Earth Card Game* is inspired by hanafuda, a traditional Japanese flower-card game. Unlike a standard card deck, the 48-card Heaven & Earth deck is made up of 12 four-card suits, representing the months of the year. Cards sport beautifully painted landscapes symbolizing ocean, desert, mountain, and sky. Decorative borders represent the four seasons and the four elements: earth, air, fire, and water. Climatic or celestial phenomena, such as snow, rainbow, full moon, and aurora borealis, appear randomly within landscapes.

The idea is to match cards to make tricks and score points. Whenever you match two cards of a given month you've turned a relatively low-scoring two-of-a-kind trick. More-challenging tricks include four of a kind and opposite month (April and October, for instance). Celestial-phenomena cards work like wild cards by multiplying the value of a trick.

Besides serving as dealer and score keeper, The Heaven & Earth Card Game is an entertainer, too, thanks to colorful animation and realistic sound effects — thunder and lightning, shooting stars, eclipses, chirping birds, chimes, and musical clips.

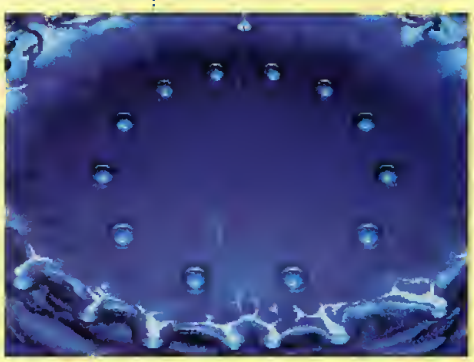
Perhaps the most daunting Heaven & Earth activity is *The Pendulum*, which the game challenges you to control so that it lands on positive energy vortices while avoiding negative ones. (Sounds awfully New Age, doesn't it?)

The Pendulum features six different scenarios (layouts) in each of the program's four increasingly difficult challenge levels: Ocean, Desert, Mountain, and Sky. Vortices, which at the simplest level look like iridescent pearls, feature color-cycling animation and sound effects.

The Illusions include 12 different types of optical brain teasers — including figure/ground puzzles, mazes, and more — with a dozen variations at each difficulty level.

The Pilgrimage, the ultimate Heaven & Earth experience, intersperses a random series of game, toy, and puzzle activities with inspirational messages. After you complete your pilgrimage, the tiles you collect along the way paint a full-color version of a meditative scene depicting Shambhala.

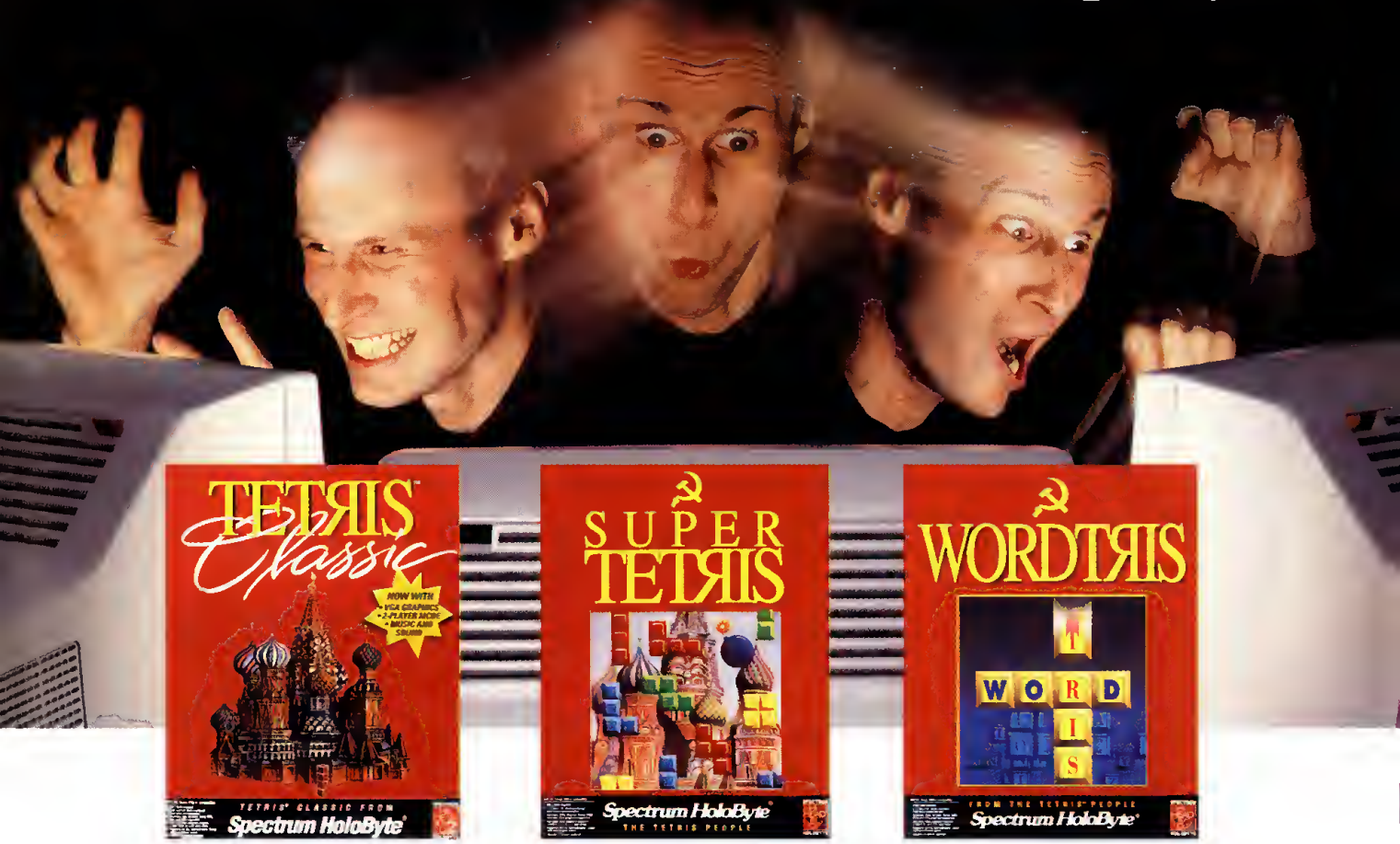
Ever played a game and found yourself thinking, "Just one more try and I'll get back to work"? Heaven & Earth — whose title signifies creative tension — offers a playful, but intellectual, environment to clear the mind and enhance productivity. Too bad a memory-resident version's not in the works. ❑



Left, cards depict natural phenomena. Right, Pendulum seeks out pearl-like energy vortices.

Buena Vista Software, 500 South Buena Vista Street, Burbank, CA 91521, (818) 567-5340; IBM PC, Tandy, or compatible; 640K RAM; DOS 3.0 or later; EGA, VGA, MCGA, Tandy 16-color; supports SoundBlaster, Sound Source; requires hard-disk drive; mouse recommended; $49.95

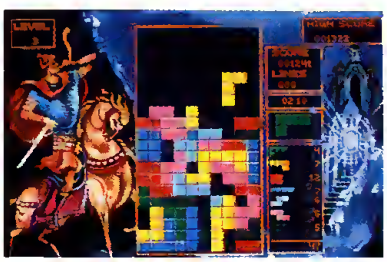
GREAT NEWS FOR TETRIS® ADDICTS.



YOUR ADDICTION JUST BECAME 3 TIMES WORSE.

Introducing Tetris® Classic. Great new VGA graphics. Great new features. Great music and sound.

It's everything Tetris is–and more! A slew of new challenging options, including head-to-head play, competitive or cooperative modes and a frenzied dual-pit play field. VGA graphics give the game a hot new look. And the music and sound effects are worthy of a 5-star Hollywood production. It isn't easy to improve a classic. But we just did.



Tetris Classic available for IBM DOS and Windows.

Super Tetris.™

The super sequel to best-selling Tetris. Super challenging. Super addictive. Because it comes with a blockbusting twist–bomb pieces that help you blast your way down to the bottom of the pit and discover treasures. Super Tetris. Just when you thought you'd broken the habit.

Available for IBM DOS, Windows and Mac/MacII.

Wordtris.™

If you thought Tetris was fun, look what we did to Wordtris. This time the falling pieces are letter blocks. Instead of forming lines, you form words. The challenge builds as the levels go higher and the blocks fall faster and faster. It's Tetris made letter perfect. You have our word on it.

Available for IBM and Mac/MacII.

Spectrum HoloByte®

THE TETRIS® PEOPLE

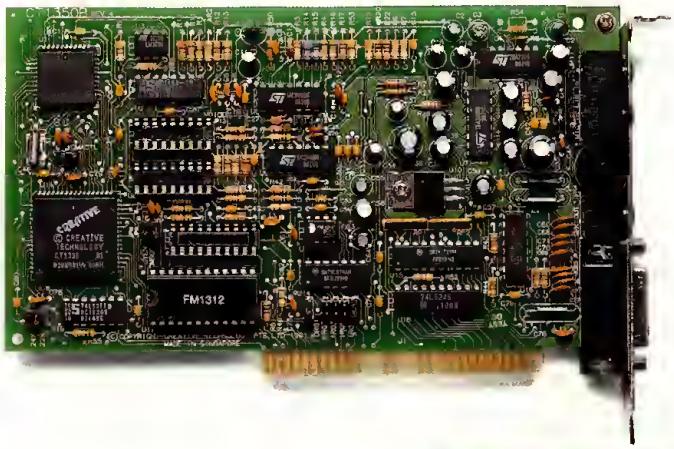
A Division of Sphere, Inc. 2490 Mariner Square Loop, Suite 100, Alameda, CA 94501

For Visa/MasterCard orders call 24 hours a day, 7 days a week:
1-800-695-GAME (Orders Only)
For technical questions call: 1-510-522-1164 (M-F: 9am–5pm PST)

Super Tetris, Tetris Classic and Wordtris are trademarks and Tetris is a registered trademark of V/O Electronorgtechnica. Spectrum HoloByte is a registered trademark of Sphere, Inc.

Circle 121 on Reader Service Card.

WE'RE LOWERING OUR STANDARDS

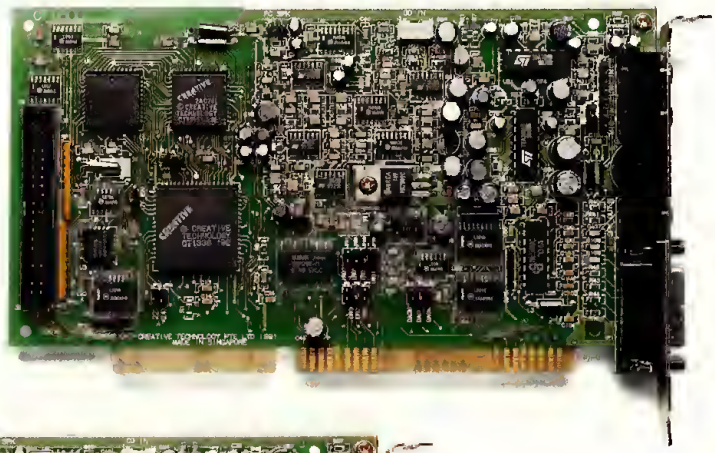


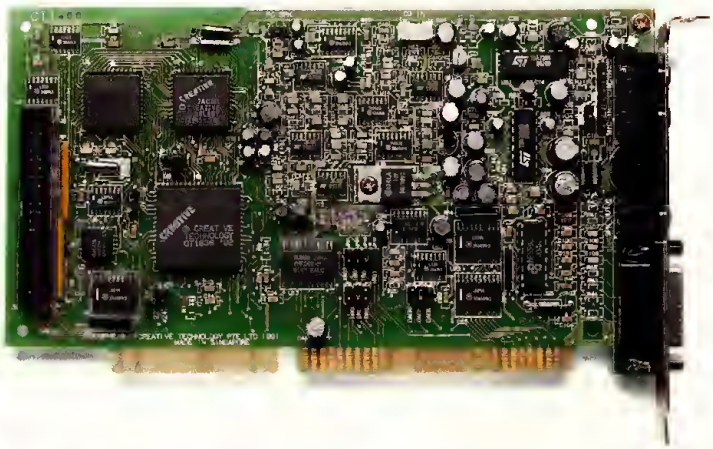
Sound Blaster™ is the PC sound standard, and its new low price makes it sound better than ever. Its great quality sound, multiple source sampling and text-to-speech capability makes ordinary computer games anything but kidstuff.

NOW JUST $149.

Just a few dollars more moves you up to Sound Blaster Pro Basic. With stereo sound, 7 software titles, 20 voice capacity and CD-ROM interface, it's the number one choice for multimedia. It'll even play your music CDs.

NOW JUST $229.





Sound Blaster Pro ratchets the standard up one more notch with all of the above, plus a complete MIDI kit with adaptor and sequencer and even more software. So it can handle everything from Fugues to Funk.

NOW JUST $299.

Visit your computer retailer or call us today at 1 800 998-LABS.

SOUND BLASTER
CREATIVE LABS, INC.

Sound Blaster is a trademark of Creative Labs, Inc. All other marks are owned by their respective companies. © 1992 Creative Labs, Inc. All rights reserved.

Circle 5 on Reader Service Card.

RetroMags

Our goal is to preserve classic video game magazines so that they are not lost permanently.

People interested in helping out in any capacity, please visit us at www.retromags.com.

No profit is made from these scans, nor do we offer anything available from the publishers themselves.

If you come across anyone selling releases from this site, please do not support them and do let us know.

Thank you!